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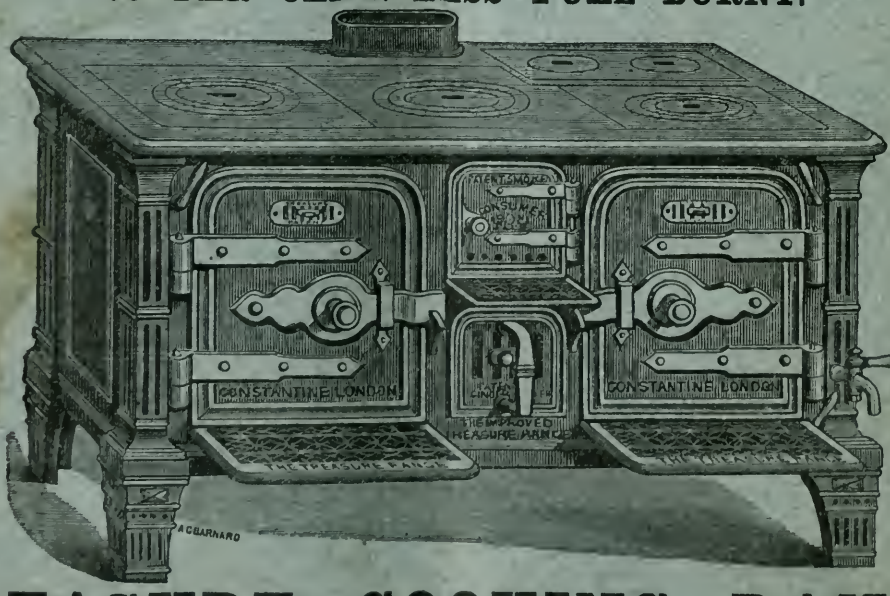

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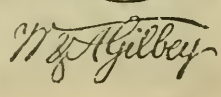

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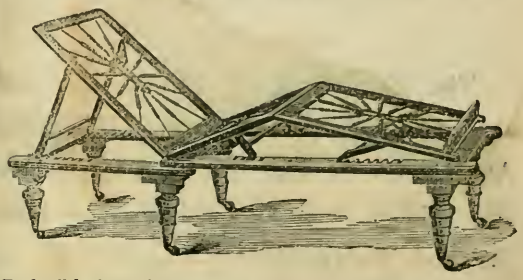

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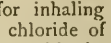

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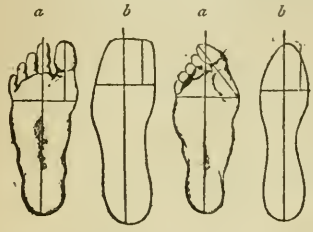

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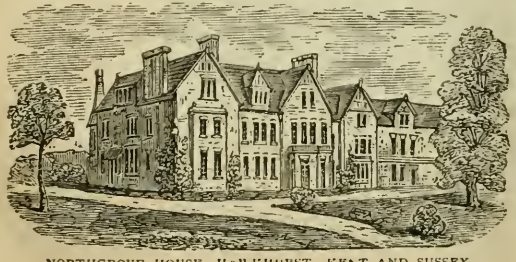

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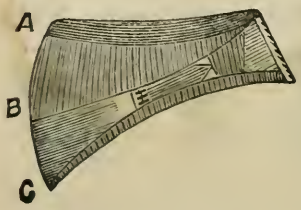

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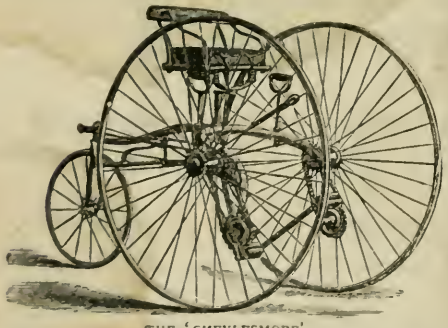

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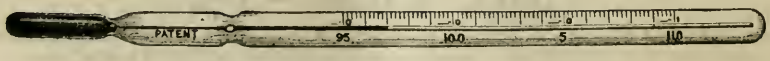

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The London Medical Record.

BIERMER ON CONTRACTION OF THE KIDNEY.

PROFESSOR BIERMER (*Breslauer Ærztlich. Zeitsch.*, 1882, No. 1) points out that until 1853, when Dr. Wilks first showed that there existed a form of Bright's disease unattended by dropsy, the opinion of the German medical clinical teachers always held the contracted kidney to be the final stage of ordinary parenchymatous nephritis. That it may be occasionally seen in such cases is possible, although it is rare for patients to survive the effects of the processes which lead to its formation. Following Dr. Traube and Dr. George Johnson, Dr. Biermer insists, from a purely clinical point of view, upon the existence of a special form of renal inflammation, which may be properly described as genuine contraction of the kidney. The course and sequence of symptoms in such cases are too typical for them to be denied a special category. Beginning, without special cause, with polyuria and small quantities of albumen in urine of low specific gravity, a gradual but progressive wasting ensues, the complexion becomes sallow, the left ventricle of the heart becomes hypertrophied, the tension of the pulse becomes increased, dyspnœa follows, and disturbances of digestion or of vision take place, without a trace of dropsy having been observed. In the later stages, the evidences of uræmia are the chief symptoms, which may culminate in death.

It is hardly possible to believe that cases running such a course could have begun with parenchymatous nephritis; and hence, Dr. Biermer holds that the process from its commencement must have been a different one. He suggests that no special etiology can be associated with this form of disease. In none of his cases does he find any exciting cause except chills, and upon the importance of these he lays some stress.

Repeated chills and complaints of cold feet are common before the disease is recognisably established; and from this fact he is inclined to ascribe a good deal of the disease to exposure of the extremities in cold underground dwellings, damp floors, etc., recognising in the polyuria of the initial stages the agency of arterial congestion within the kidney, induced by these means. He points out, in passing, that the very occurrence of increased instead of diminished secretion of urine proves that the early affection of the kidney is not obstructive in its nature, *i.e.*, causes no narrowing of the lesser tubules.

In the later stages, three influences may be recognised as playing a part in the destructive processes in the walls of the vessels—the mechanical influence of the frequently increased tension within the vessel, the degenerative influence of frequent congestion, and the more subtle influence of impaired nutrition. To the second of these, viz., frequent congestion, one must look for the explanation of the occasional excess of albumen thrown off.

The form of contracted kidney described in association with atheroma of the arteries differs in many points from this genuine idiopathic nephritis atrophicans. In the atheromatous form, the symptoms of changes in the heart and arteries appear long before the albuminuria and the signs of renal contraction. In the genuine contracted kidney this order is exactly reversed. Histologically, also, there is a difference, the contracted kidney showing a marked overgrowth of connective tissue, the atheromatous form being simply atrophied, with certain epithelial changes.

Two other forms of contracted kidney may be recognised, viz., the contraction after parenchymatous nephritis, or the amyloid state, and the gouty kidney. The first of these, with or without amyloid change, is rarely seen. The gouty kidney, besides its diathetic origin, shows changes which are more purely atrophic, and often cystic or pyelitic. In its early stages, moreover, its symptoms are quite distinct, although less easily distinguished towards the close.

The course of a genuine contracted kidney is from the beginning insidious and chronic. The earlier stages have been already mentioned. The later stages may be divided into two periods—one, in which the concurrent hypertrophy of the heart maintains a sufficient compensation, and the other, in which it ceases to compensate properly, and in which the symptoms of uræmic poisoning are most prominent. Complications such as apoplexy, pneumonia, erysipelas, etc., are frequent; but, where none such occur, contraction may go on to an astounding extent.

Of the individual symptoms, the state of the urine is the most important. The proof of the presence of albumen in the urine is indispensable; but it must be remembered that the amount often varies greatly, and that it may sometimes be altogether absent for a short time. Bodily exercise and muscular effort favour the production of albuminuria, and Biermer has often produced it in suspected cases by these means. Microscopic examination generally shows a scarcity of solid elements, a few isolated hyaline cylinders, and, at times, a little renal epithelium, but rarely any blood-corpuscles. The excessive secretion of urine is not accompanied by thirst.

The condition of the heart, of the arteries, and of the fundus oculi, are of decided importance in diagnosis; though neither of them, taken alone, is essential. A certain amount of hypertrophy of the left ventricle is almost always present, and high tension is maintained in the arteries, even, as some English observers have shown, during the diastole in extreme cases. Palpitation is frequently complained of. Retinal changes may or may not be present, and are very variable in their extent and severity. Disturbance of respiration is always present; dyspnœa is frequently the first subjective complaint. In the earlier stages, it is probably due to cardiac derangement, but later on the cause is generally uræmic. Occurring frequently in cases with pulmonary complications, its importance as diagnostic of renal disease may be overlooked. Cerebral symptoms are not usually present till the late uræmic stages. Early uræmic states may show themselves in headache, vomiting, etc.

Disturbance of digestion is sure to appear sooner or later. The general nutrition is always affected; indeed, it is never properly maintained in the presence of chronic renal disease. This fact serves to distinguish the organic renal mischief from the functional and innocuous albuminuria which has been described of late years. If any person have albuminuria for several months, and do not lose flesh, he certainly does not suffer from contracted kid-

ney. Dropsy plays a negative part, and, if present to any extent, must be due to one of the other forms of chronic renal disease, and not to genuine contracted kidney.

Biermer closes his remarks with the statement that he knows of no effectual means of treatment for this disease. He speaks strongly as to the danger of checking the diuresis, and hence finds all astringents to be contra-indicated. Even tannin, which he would employ in parenchymatous nephritis, he objects to in this form of disease. Diuretics and tonics are to be used until the uræmic state is arrived at; and during that period only narcotics, as morphia and chloral, should be given, simply with a view to the temporary relief of the strugglings and sufferings of the patient.

E. CLIFFORD BEALE, M.B.

LITTEN ON THE RELATION OF LIVER-DISEASES TO RETINAL AFFECTIONS.

DR. LITTEN has communicated (*Deutsch. Med. Woch.*, 1882, No. 13) the results of his ophthalmoscopic examinations during the last ten years of patients affected with liver-disease. The changes observed he divides into three classes; first, extravasations, mostly in the granular layer; second, white patches in the retina caused by fatty degeneration; and, lastly retinitis pigmentosa. Extravasations he has observed in fifteen cases of liver-disease; namely, in four cases of uncomplicated obstructive jaundice, partly catarrhal, partly through calculi, in four cases of hepatic cancer, in one case each of acute atrophy, of phosphorus-poisoning, of hepatic abscess, and of dropsy of the gall-bladder, and in two cases of cirrhosis. In the four cases of obstructive jaundice the extravasations appeared at the climax of the disease, and caused no disturbance of vision. The case of abscess was the result of calculi, and was the only one out of many such cases in which Dr. Litten observed retinal extravasation. He finds that retinal extravasation is almost a constant symptom in those cases of hepatic abscess occurring from embolism in septicæmia and other infective diseases. In the case of dropsy of the gall-bladder no hæmorrhages were observed till the swelling was aspirated, when retinal extravasation was very soon found. Of the above fifteen cases, only seven proved fatal, so that it cannot be regarded as an unfavourable symptom, as has been supposed. At the same time, Dr. Litten in these seven cases found extravasations in other organs, and no doubt there were also extravasations in those cases that recovered. These extravasations do not seem to be caused solely by the deleterious effect of the bile in circulation, for Dr. Litten has found that retinal extravasation never occurs in dogs and rabbits from ligature of the bile-ducts, notwithstanding the marked jaundice produced thereby.

The second form of retinal alteration, Dr. Litten has observed in a case of phosphorus poisoning, resulting in acute atrophy of the liver. The retina in this case was studded with white patches, about a sixth or a fourth of the size of the pupil, and these patches he found *post mortem* to be caused by fatty degeneration of the retina, with numerous 'granule corpuscles'. A case of phosphorus poisoning, with acute atrophy of liver, has since been published by Duke Charles of Bavaria, in which centres of fatty degeneration were found in the cortex cerebri; and Dr. Litten considers that here, as in many other cases, the opthalmoscopic appearances of the fundus oculi give us an opportunity of observing the pathological processes going on in other organs.

The third form of retinal change, consisting in typical pigmentary degeneration of the retina, Dr. Litten has observed in two cases of liver-disease, both cases being hepatic cirrhosis in the stage of contraction. The first patient was a man aged 58, with extreme ascites. He complained of failure of sight, consisting in hemeralopia and a narrowing of the field of vision, with good central vision. The ophthalmoscope showed characteristic retinitis pigmentosa. After paracentesis, however, neuro-retinitis appeared, with marked increase of the pigment and loss of central vision. The second case was also a male, aged 42, who was admitted for ascites without jaundice. The fundus and vision were normal on admission; but after some time he complained of hemeralopia, but with no narrowing of the field of vision. The ophthalmoscopic appearances were characteristic, and during the eight days that the patient was under observation increased markedly. Unfortunately, neither of these patients could be kept under observation for any lengthened period. Landolt has observed retinitis pigmentosa in a case of hepatic and also in a case of nephritic cirrhosis, and considers that it is a chronic inflammatory process, in which the nervous elements of the retina are destroyed by the connective tissue, formed in the first place in the adventitia of the peripheral retinal vessels. This process seems closely allied with the chronic inflammatory process resulting in contracted liver and contracted kidney; not that either of these conditions produces the retinal affection; but the patient affected with the two diseases has either by heredity, by syphilis, or some other cause, a disposition to the formation of connective tissue in certain organs. The degeneration of the retina depends on diminished nutrition, and is associated with a disappearance of the retinal pigment, and a migration of the same into the innermost retinal layers. Dr. Litten has also proved experimentally that the pathological pigment of the retina comes from the choroid, with which it is allied both histologically and chemically. How the migration of pigment takes place he cannot explain. He mentions, however, a fact recorded by Professor Bischoff, that two dogs, in which he had formed a biliary fistula, became completely amaurotic, and their eyes showed *post mortem* the appearances of retinitis pigmentosa as it occurs in the human eye: but the pigment was deposited also in the hyaloid membrane, and even in the lens.

The record of careful and prolonged observations like those of Dr. Litten is in the highest degree important. Through the work of Dr. Hughlings Jackson, we have in this country become aware of the importance of ophthalmoscopic examination in all cases of nervous affection, and we are probably all of us fully impressed with its value in Bright's disease; but we are still too much inclined to isolate the ophthalmoscopic changes as peculiar to the eye, and having little or no association with changes occurring in other organs. Such observations as those of Dr. Litten, recorded above, have a general value in correcting this error, as well as a special value in extending our knowledge of ophthalmic diseases. At the same time, we must remark that the value of his observations would have been very considerably increased, had he stated in what propor-

tion of patients with liver-disease retinal changes occur, and also had he stated definitely in each case that there was no possibility of complication.

JAMES ANDERSON, M.D.

GERHARDT ON CERTAIN VASCULAR NEUROSES.*

CLAUDE BERNARD'S experiments in 1851, on division of the cervical sympathetic nerve, were the first to throw any light upon the subject of the functions and imperceptible actions of the vaso-motor nerves, which have been further elucidated by the researches of Cyon, Ludwig, and Von Bezold. They show that the circulatory system would be capable of taking up double the amount of blood it normally contains, and that it accommodates itself to the blood in an irregular manner; so that, according to necessity, a larger amount of blood can be supplied to the more important organs. Each alternation of temper, each operation of the intellect, requires a momentary flow of blood to the brain; and in a central station, situated in a small part of the medulla oblongata, the vaso-motor nerves lie close together. From it issue the enormous impulses which set in motion the system of vessels. Lesser independent vaso-motor regulators are found in the spinal cord and outside the arteries. Such apparatus as the vaso-dilator nerves show the multiplicity of the aids which can here be called in; others, like the depressor of the heart, show what powerful levers can be applied, and how correctly and silently they are used.

It is indeed a question in what pathological process the vaso-motor nerves do not take a prominent part, every theory of fever and inflammation being connected with them, and the hemiplegia which has been cured being still recognisable from the altered pulse-curve. Some arteries only are dilated in commencing aortic patency, whilst others resist the pressure of the systolic blow by the tonicity of their muscular coat. The unilateral blush of the pneumonic and phthisical patient, and the higher temperature in one axilla of the former, are due to vaso-motor disturbances, as are also Cheyne-Stokes respiration, diabetes, and some forms of albuminuria; and it would not be going too far to assume that those neuroses which are of short but severe duration, and are easily treated, undergoing relapses and communicated by irritation, are likewise due to vaso-motor disturbances in the central nervous system, such being chorea, epilepsy, tetanus, and catalepsy.

The formation of aneurisms, and vaso-motor gangrene, show adequately the capabilities of a disordered function of the vascular nerves; a symptom of poisoning by ergot being gangrene, caused by paresis of the arterial muscular coat; and the connection of some aneurisms with paralysis of the vessels, having led Von Langenbeck to the use of ergot, subcutaneously, in their treatment. The author selects the best known of the numerous vaso-motor disorders, and points out that the heart's action depends on its own ganglionic system, on the quickening influence of the sympathetic, and the inhibitory influence of the pneumogastric nerve-fibres. In addition to these, there is the resistance offered by the contraction of the muscular coat of the arteries, which, if increased, retards the heart's action, and the different conditions of fulness of the coronary arteries, a narrowing of whose lumen also retards the heart, as is seen typically in aortic stenosis. Of least account in pathological cases are the strength, number, and rhythm of the contractions; regarding the first of which the author remarks that more than half of the patients seeking his advice about palpitation of the heart suffered, not from valvular disease, but from some disturbance of the cardiac innervation. Increased action of the heart is in many cases a symptom only of hypertrophy from other causes, *e.g.*, cirrhosis of the kidney; in others, *e.g.*, simple hypertrophy, it is the primary and causal symptom, the hypertrophy the secondary. The number of contractions becomes interesting when the extremes are considered, which constitute peculiar forms of disease due to well-known disturbances in the nervous system of the heart.

Of *Tachycardia*, which occurs in two forms, lasting and transitory, the author gives very interesting cases. It is necessary to distinguish between the purely nervous form of tachycardia and others of a toxic nature (from atropia, tobacco, etc.), or symptomatic of a local or general disease, which are only of minor import. Paralysis of one cervical sympathetic has no perceptible influence on the heart, according to Nicati, whereas, on the other hand, stimulation causes increased and stronger cardiac action. This is the place in which to make mention of the palpitation and increased pulse-rate occurring in Graves's disease, and in many persons with affections of the neck and upper dorsal region. Most cases of nervous tachycardia are to be attributed to paralysis of the vagus; those which have a pulse-rate of 200, to a combined stimulation of the vagus and sympathetic; lighter forms entirely to the latter.

Bradycardia, or slowness of the heart, can be induced by poisoning, either through the vagus or through the cardiac ganglia (digitalis and salts of the bile-acids), also by anæmia of the heart itself, *e.g.*, in atheroma of the coronary arteries, in aortic stenosis, and in fatty degeneration. Flint has described bradycardia as a purely functional disturbance of the heart, and in six cases observed the pulse to fall to sixteen beats in the minute. In two of these there was epilepsy, and in two, delirium. Dr. Gerhardt relates a case of his own in which the *post mortem* examination revealed a moderate extravasation of blood between the aorta and pulmonary artery, corresponding to the cardiac plexus.

Angina pectoris (*stenocardia*) is independent of lesions of the spinal or the cerebral cardiac nervous system. The true lesion is well known; whilst, in the more functional cases, *e.g.*, the hysterical, spasm of the arteries over a great extent of the body, or simply of the coronary arteries, seems to be the lesion. Nothing is more useful in its treatment than the hypodermic injection of morphia; in the free intervals, the nature of the case will indicate the treatment necessary; *e.g.*, in heart-disease, rest of body, locally cold, internally digitalis, squill, valerian, in short, means to elevate the blood-pressure. Hysterical cases are to be treated by gymnastics, cold baths, arsenic, bromide of potassium, etc.

Nicati has most admirably described the diseases of the cervical sympathetic. Paralysis of one nerve causes hyperæmia of the side of the head by the vaso-motor nerves, in consequence of which, there are unilateral elevation of temperature and hyperidrosis. External cold has less effect on the diseased side than on the healthy one; but also warm air is

* Volkmann's *Collection of Clinical Lectures*, 1881.

less capable of elevating the temperature of the altered side than of the healthy; the ocular tension is lessened on the unhealthy side, the pupil is contracted. In the second stage, the vessels of the paralysed side become less full; the face therefore is paler, the temperature of the side is decreased, and anidrosis takes the place of hyperidrosis; the pupil is smaller, the ocular tension less even than before, the latter probably from the decreased arterial tension which caused the pale face. H. Müller has discovered in the eyelids smooth muscular fibres, paralysis of which causes gradual closure of the lids and ptosis. A certain irregularity in point of occurrence is noticeable in this lesion. Franck found, in his experiments on animals, that irritation of the sympathetic produced dilatation of the pupil earlier than narrowing of the vessels; and, on ceasing the irritation, the pupil contracted, but the vessels became still more contracted. Nicati finds a middle stage between the first and second stages of paralysis, in which the hyperæmia and elevation of temperature continue, but the hyperidrosis has already ceased; and Dr. Gerhardt goes on to say that the relation between these three symptoms is not so simple as hitherto imagined, and that the dry, hot, and flushed face of a fever-patient militates against it. Ott and Wood Field have endeavoured to localise in the corpora quadrigemina a centre inhibitory of the secretion of sweat. Paralyses of the cervical sympathetic are found partly in ordinary simple cases, partly in the most complicated forms of disease, *e.g.*, often in phthisis, scrofulous disease of the glands, and in goître; seldom in aneurism of the aorta, in caries of the cervical vertebræ, in muscular atrophy, and in diabetes.

Foa, in his methodical anatomical examinations of the ganglia of the cervical sympathetic, found changes therein very frequently; so that it seems as if we must attach more importance to the symptoms on the living patient than to the lesions found, which have not always been accompanied by symptoms before death. It cannot be regarded as accidental that in some cases of atrophy the face becomes of a vermillion colour, whilst the sweat is continually pouring down from it and the head. The diagnosis of tabes dorsalis is easy, if we find myosis well-marked on both sides; and we then also know, that the upper dorsal region of the spinal cord is already attacked. These cases run a rapid course, and are of worse prognosis than those in which the eyes are not involved. As regards diabetes, there is sufficient to show that it is a diseased condition of the processes of oxidation of the tissues; and, when disturbances of digestion, the action of poisons, etc., are struck out of the list of causes, there remain diseases and injuries of the nervous system to account for the condition, more especially injury of the two lower cervical and the first dorsal sympathetic ganglia. Extirpation of these in animals has produced melituria (Eckhard, Cyon, and Aladoff). The author recounts numerous examples of sympathetic disturbances in diabetic patients. Hyperidrosis of the head, hemicrania, and Graves's disease have particular relation to the cervical sympathetic. Nitzelnadel pointed out some years ago that the secretion of sweat is governed both by spinal as well as by sympathetic nerves; and the experiments of Vulpian, Luchsinger, Adamkiewicz, etc., show that secreting fibres run in the sympathetic as well as in its plexuses. Sweating after muscular exertion, and as a reflex result from cutaneous irritation, is not taken into consideration in speaking of the head; but psychical influences take part in it, particularly in localised anidroses and hyperidroses, the origin of some of which is still very doubtful.

Gerhardt has observed hyperidrosis of the end of the nose, which has, in some people, existed since childhood. In many phthisical patients, perhaps accidentally, hyperidrosis of the region of the chin is also observed; and in middle and old age, unilateral hyperidrosis of the head is very common. Should neuralgia and hyperidrosis exist together, this will be only in the extremities, facial and occipital neuralgia being always dry. It is certain, however, that hyperidrosis may exist without any other symptom of trigeminal or sympathetic lesion, although in many cases slight glandular or other swelling, phthisis, or bronchocele may exist in a slight degree. Hyperidrosis seems to be a symptom indicative of the anterior columns of the spinal cord being involved whilst the pupillary symptoms accompany usually posterior sclerosis (locomotor ataxy). Palpitation of the heart often accompanies the sweating, particularly if goître exist. Some therapeutic hints may be obtained from these facts, especially when we remember that Katyscheff and Dobrotowsky recommend faradisation of the cervical sympathetic for inflammatory reddening of the membrana tympani; and L. A. Gordon, for hyperidrosis of the feet and hands, adopts a similar plan with success. The endermic and hypodermic methods of administering atropine ought to have a trial.

Until 1851, when Bernard discovered the influence of the sympathetic on the vessels of the head, hemicrania was considered a neuralgia of the brain or meninges, etc. Du Bois Reymond threw more light upon the subject in 1860. He pronounced hemicrania to be a lesion of the sympathetic, his grounds for this being that the face becomes pale, the arteries narrow and tense, the eyelids semi-closed, from spasm of the tunica musculosa. Möllendorf believed it to be due to paralysis of the sympathetic. Both these views were proved to be well-founded, and again therapeutic facts were discovered; *e.g.*, the inhalation of amyl-nitrite was found to cut short the attack. Specifics are of less service than those drugs which we know to be regulators of the vasomotor nerves, *e.g.*, arsenic, large doses of quinine, potassium bromide, etc., bodily exercise, cold water cures, etc., are also serviceable. The author has not seen much benefit from the administration of guarana and caffeine.

Basedow's or Graves's disease had at first a great struggle for existence. In 1855, Koeber traced its origin to the cervical sympathetic. Its symptoms are invariably bilateral; those of more well-known lesions of the sympathetic are unilateral, and such lasting tachycardia does not occur in any other disease. Severe and depressing mental impressions are the causes of this disease, and the cortical portions of the cerebrum are the points which are most influenced by these. The favourable course which the lighter forms run is against the assumption of extensive anatomical alterations in the cervical sympathetic. In the severer forms other symptoms appear, in addition to those of tachycardia, bronchocele, and exophthalmos; for example, those described by Geigel as cerebral congestion with psychical disturbances, passive anasarca, attacks of diarrhœa, cough with serous expectoration, congestion of the liver with jaundice, etc. More than the sympathetic nerve must, therefore, be involved,

probably the vaso-motor centre; but the experiments of Brown-Séquard, Duret, and others, show that superficial lesions of the cerebrum (even of the dura mater in the parietal region only) react upon the ocular, auri-ocular, and facial fibres of the sympathetic. Eulenberg and Landois proved the existence of vaso-motor centres in the cortex of the dog's cerebrum which would have to be considered in localising the cause of this disease (*i.e.*, Graves's). Against such assumption, therapeutical facts can be recorded. Besides quinine and iron, digitalis, cold water, and tincture of veratrum viride (Sée), Von Dusch has obtained some renown for the galvanisation of the cervical sympathetic in the treatment of exophthalmos.

Lastly, neurasthenia is discussed, a form of disease which was formerly known under the terms 'nervousness', irritable weakness, etc., but has only lately obtained a definite character. It being of very multiform nature in its symptoms, the different descriptions met with under various authors are easily reconcilable, but all agree in the particular that its situation is in the vaso-motor nerves. Runge found 97 per cent. of pure cases to occur in men. It may be considered the homologue of hysteria, appearing usually after the fortieth year. Persons who are exposed to great mental and bodily exertions, who have irregular and little sleep, whilst giving themselves up to the pleasures of life without restraint, suddenly break down, not to recover for many years. The commencement is usually heralded by an attack of fear, with an aura ascending from the thorax, precordial pain, palpitation, dyspnœa, sweating, and delusions. After these there are giddiness, cerebral oppression, and a constant desire to press the head with the hand, itching, and sometimes headache (in 20 per cent. of Runge's cases). The voice becomes faint and toneless; standing tires the patient or makes him giddy; refreshing sleep is out of the question, frightful dreams, electrical starting out of the sleep, lastly, awakening with dulled intellect being the substitutes. Others sleep well, despite the miseries of the day-time, but are as weak in the morning as the night before. Nearly all the patients suffer from different forms of giddiness, combined with terror; most frequently from agoraphobia, but also from fear of railway travelling (siderodromophobia, Rigler), of closed rooms (klitrophobia, Raggi), nyctophobia (Eyselein), etc. The author has three patients with the disease well marked, who only get this symptom when walking on asphalte, so that the number of 'phobias' which could be made out is quite incalculable. A certain degree of hypochondriasis is thus seen to exist in these cases. According to Runge, melancholia often also appears; and, in a case observed by the reporter, this and a dread of firearms were most prominent symptoms. Hemiplegia, apoplectiform attacks, and aphasia are possible concomitants, but recovery is the rule after from one to three years, though relapses are certain to occur if the original cause be not kept at a distance. A surgeon who has suffered from neurasthenia for many years, classifies his symptoms as follows. At the commencement:— 1. Palpitation; 2. Dull, oppressive feeling in the head; 3. Oppression in the nape of the neck; 4. Asthma; 5. Meteorism and diarrhœa; 6. Rheumatoid pains; 7. Weakness in the lower extremities; 8. Disturbed slumber. Later on, much the same. At present, the same, but improvement in all; sleep now quite regular, but the fear of some accident constantly before him.

It is remarkable, according to Gerhardt, how little use is made of the stronger vaso-motor regulators, *e.g.*, lead, atropine, ergot, digitalis, amylnitrite, in the treatment of this affection. C. Ludwig's dictum finds its application here, namely, 'that no poison in our treasury of drugs is capable of steeling weakened nerves permanently, or of quieting the over-irritable ones'. A regular mode of living, sufficient and regular sleep, exercise in the open, bodily labour, distraction in amusements, moderate cold water treatment, are of the only permanent benefit to the neurasthenic patient. Some little good may be got out of quinine, small doses of arsenic, valerian, potassium bromide, or, according to Beard, from general electrisation and the use of the zinc compounds. The author saw some results from the use of bromide of camphor; but all these must be given alternately, with intervals, and in small doses.

F. WILLIAM ELSNER.

MEYER ON PAINFUL PRESSURE-POINTS.

DR. MORITZ MEYER (*Berlin. Klin. Woch.*, No. 31, 1881) has already called attention (*ibid.*, No. 51, 1875) to the indications for galvanic treatment obtained from the presence of painful pressure-spots along the spine. In the present paper, he re-states and illustrates this point, and extends his statement to pressure-spots discoverable along the whole course of the trunks and branches of nerves.

The first case adduced is that of no less a patient than Professor Westphal himself, who, in May 1880, had an attack of neuralgia in the right arm and shoulder. Dr. Meyer discovered a painful pressure-point at the upper part of the brachial plexus. An anode of ten cells was applied to it, and within five minutes the pain had considerably subsided. The repetition of the operation four times during the ensuing week was sufficient to effect a complete cure. In the next two cases, the result of the treatment is the more striking, that previously the patients had been subjected to galvanic treatment on the usual system.

A girl, aged 14, had for the last nine months suffered from severe pains in the fourth interosseous space of the right hand, extending upwards along the radial nerve, to the posterior edge of the deltoid. Most movements of the arm had become impossible. The galvanic current had been applied to the hand and forearm during several weeks. Dr. Meyer discovered a limited tender spot in the brachial plexus. The anode was applied over it, with the immediate result of enabling the patient to write a few words. Every successive application determined further progress; and, after the seventeenth, the patient was considered well. Subsequently, after excessive writing, there was a slight relapse, which rapidly gave way to the same treatment.

Another patient, aged 19, in consequence of an injury to the head of the ulna, for which she had worn a plaster bandage for six weeks, had, during two years, suffered from neuralgia in the ulnar nerve, which deprived her of the use of the arm. Every kind of treatment, including galvanism locally applied, had failed to give any relief. A tender spot was found at the lower part of the brachial plexus; and the treatment was accordingly conducted as in the previous case. Very soon the pain diminished, and the patient began to be able to extend and abduct the little finger. After twenty applications, she was able to paint, play the piano, etc. Writing

was still difficult, and the treatment was persevered in for another series of thirty applications, when she had practically recovered.

The following cases illustrate the indicative importance of pressure-points for galvanic treatment in other neuroses.

A patient, aged 27, had suffered for nine years from sick headache. The attacks were very frequent, chiefly in the left side. There was tenderness over the upper cervical transverse processes. The positive pole, of six elements, was applied to this spot on each side, the negative under the ear of the corresponding side, for three minutes. Thirty-five such applications, spread over three months, relieved her completely. A slight relapse after undue excitement and exertion, was overcome by a repetition of the treatment. There had been no relapse for the last four years.

A banker, aged 30, became affected with twitchings on the right side of the face. Pressure on the third and fourth cervical transverse processes was painful, and arrested the twitchings. Two courses of anodal galvanisation of the spots, successfully relieved the patient, who has been free from any symptom for the last twelve months.

In a third patient, a fall downstairs, two years previously, produced injury to the right scapular region; this was followed by a neuralgic condition of the shoulder and arm, with difficulty of breathing. Dr. Meyer found the motor points of the rhomboid (which was in a state of contraction) and the serratus magnus painful. Rapid recovery took place under galvanisation of these points.

Dr. W., aged 40, after a strain six years ago, lost power in the left arm, and experienced a sense of tightness in the left side of the thorax. He had been through a number of methods of treatment, external and internal, but without benefit. Two painful points were found: one over the seventh cervical spinous process, pressure upon which caused violent hiccupping; the other over the origin of the left phrenic nerve, from the third to the fifth left transverse processes. A short galvanic treatment of nine sittings of these spots brought about a marked improvement. Nothing remained, on the patient's compulsory departure from Berlin, beyond a vague sense of discomfort. Later news from the patient showed the improvement to be lasting.

On the strength of these and many other cases, the author insists on the necessity of carefully searching in all cases of obstinate neuroses for painful spots. Weak currents are indicated especially at first.

A. DE WATTEVILLE.

VERNEUIL ON ERYSIPELAS.

M. VERNEUIL, in a communication to the Paris *Société de Chirurgie* (*Revue de Thérapeutique Médico-Chirurgicale*, 15 Mars, 1882), points out that erysipelas has considerably diminished in frequency in hospitals. Formerly there was always erysipelas in surgical wards, but at the present time there are no longer seen in Paris those great epidemics and constant endemics of erysipelas which frequently arrested the hand of the surgeon. The antiseptic method has rendered great service in relation to erysipelas, but it has done still more with reference to septicæmia. At the present time, in fact, people still die of erysipelas.

We begin to know what is to be feared when we operate on a diabetic or alcoholic patient; but what have we to fear when we operate on a patient who has already had one or several attacks of erysipelas? Do these previous erysipelatous attacks influence the prognosis of the operation?

M. Verneuil furnishes three cases, as a contribution to the study of this question. When he was a young surgeon, he was called to see a merchant suffering from alcoholism who had spontaneous erysipelas of the face, of which he was cured; it left, however, a swelling of the glands which persisted instead of becoming dispersed. Two or three months afterwards, an abscess was formed in the sheath of the sterno-cleido-mastoid muscle; he opened it. Two days later, erysipelas developed itself, invading the whole face, becoming complicated with delirium tremens, and ending very speedily in death.

In 1866, M. Verneuil was called in by Dr. Brown-Séquard to see a Creole, who had lived for some time in France, and who was attacked by osteitis in the foot: M. Verneuil found that two years previously the patient had had spontaneous erysipelas of the face. As he suffered from severe pains in the foot, M. Verneuil made subcutaneous injections of morphia. At one of the punctures erysipelas was developed, and invaded the whole of the leg; abscesses formed, and in one of the fistulous passages erysipelas occurred, which successively invaded the whole body. Some time afterwards, further and very intense inflammatory symptoms appeared; and amputation at the tibio-tarsal joint became necessary. The amputation was accompanied by considerable hæmorrhage. On the third day, erysipelas showed itself; then secondary hæmorrhage supervened, which necessitated ligature of the posterior tibial artery. The patient died on the evening of the next day.

M. Verneuil was consulted by a man, aged 51, in strong health, very tall and fat, who had been operated on by M. Cusco for an epithelioma of the lip. There was an enlarged submaxillary gland. At Vichy, this man had had an eruption of eczema on the thigh. In September he had, without any apparent cause, erysipelas of the face; it was cured in nine days. M. Verneuil operated on his gland, at the end of September, in his own country house, under excellent hygienic conditions, one Sunday, without having previously visited the hospital, having new instruments, and assisted by two colleagues, who, at that time, had not a single case of erysipelas among their patients. He applied the antiseptic method in all its rigour. Four days afterwards, the patient had a rigor; there was lymphangitis of the right arm, then phlegmonous erysipelas of the right arm and the left leg, which necessitated several incisions. On the third day, he had severe sore throat, which seized on the cheeks: he had erysipelas of the face of pharyngeal origin, to which he succumbed twenty-three days after the operation.

It becomes a question whether there is a special pathological condition determined by repeated attacks of erysipelas. We know that in certain regions, in Brazil, for instance, attacks of lymphangitis are very frequent. M. Verneuil knows a woman who has had seventy-nine attacks of erysipelas of the face. What, then, are the risks run by the surgeon who operates on the patient who has had one or several attacks of erysipelas? The recurrence of erysipelas in the same region may possibly be explained by anatomical conditions. But the difficulty is how to explain the recurrence of erysipelatous attacks at a distance.

ESMARCH ON THE TREATMENT OF INJURIES OF THE BLOOD-VESSELS IN WAR.

THE following is the substance of a paper read before the section of Military Surgery in the International Medical Congress held in London in August 1881.

1. The indications for the treatment of injuries to the larger vessels, and for traumatic hæmorrhage, have been materially simplified by antisepsis and artificial bloodlessness.

2. Ligature of the trunk of the artery above the wound, formerly practised, is uncertain, and therefore should be abandoned, especially when the tissues are infiltrated by inflammatory exudation.

3. Styptics should also be abandoned, since they are uncertain in their action, and, by rendering the wound dirty, retard its union.

4. In every case of hæmorrhage threatening life, the injured vessel must, if possible, be laid bare at the injured spot, and tied above and below with catgut or antiseptic silk.

5. The operation must be conducted strictly antiseptically and, in the case of the extremities, by the aid of artificial bloodlessness (Esmarch's bandage).

6. The chief means of making such operations easy lies in making a long incision, which lengthens the wound in the long axis of the limb. When life is concerned, it matters little whether the incision be an inch or a foot long; as, if it succeed in checking hæmorrhage, and be conducted thoroughly aseptically, a long incision heals just as well as a short one.

7. A proper incision having been made through the skin, the deeper tissues are laid open, the left forefinger being used as a director, upon which they are divided to the same extent by a blunt-pointed bistoury. They are then held apart by either blunt or pointed hooks.

8. Coagulated blood is now quickly and energetically removed, either with fingers, sponges, or raspatories, and as thoroughly as if it were intended to make an elaborate dissection. The coagulated blood covers everything, and is a fertile soil for the noxious matters exciting inflammation.

9. This being accomplished, the vessels and nerves are felt for with the finger, and an endeavour is made to get some idea as to the nature of the injury by the aid of the cleansing sponge, with which arteries, veins, and nerves are isolated.

10. If the veins be quite bloodless and collapsed, it is difficult to distinguish them from cords of connective tissue; it is therefore advisable to form a reservoir of blood below the wound by placing a ligature round the hand, for example, before applying the elastic bandage to the arm. Afterwards, on elevating the limb and removing the ligature, the blood flows out of the injured vein, if the vessel have been such.

11. If the injured part of artery or vein have been found and exposed sufficiently to enable the whole extent to be seen, the vessel must be isolated and tied, above and below the injury, in a healthy situation, securely and tightly, with catgut or antiseptic silk (reef-knot). The vessel, if not already divided by the injury, is then cut between the ligatures. If any branches be found between the ligatures, they are isolated and tied, and separated from the trunk of the vessel.

12. The tubing is now released, and all remaining vessels from which any blood issues are ligatured; the limb being elevated, as in amputations when the tubing has been removed, to lessen the parenchymatous bleeding.

13. Divided nerves and tendons, should they be found in the wound, are to be united by fine sutures of carbolised silk or catgut.

14. Foreign bodies, *e.g.*, bullets, fragments of clothing, very loose bone-splinters, should be carefully removed.

15. The whole wound is then disinfected most carefully by washing, rubbing, and rinsing with solutions of chloride of zinc and carbolic acid, or iodoform-spray. An endeavour must be made to penetrate into every crevice of the wound.

16. Counter-openings having been made in suitable situations, and drainage-tubes introduced, the wound is closed by antiseptic sutures and covered by antiseptic dressing.

17. The performance of this operation is not suitable to the battle-field, because it requires much calmness, time, and care; and because the antiseptic precautions can only be observed in a well-constructed lazarette.

18. For provisional hæmostasis on the battle-field, elastic compression is alone suitable.

19. The use of styptics is to be forbidden, therefore such articles as perchloride of iron, Pinghawar Yambi, etc., should be left out of the dressing materials.

20. Equally injurious and dangerous are the much used tourniquets, not only because they require a certain amount of anatomical knowledge in their application, but because the pad (be it ever so well adjusted) becomes displaced during transport, and so only checks the venous circulation instead of the arterial; the result being dangerous infiltration if the opening of the wound be closed, and recurrence of hæmorrhage if it be open.

21. Satisfactory and lasting compression of the vessels is obtainable by an elastic tube or girth being drawn round the limb several times, tightly stretched. By this means the soft parts are so well drawn together, that not a drop of blood can pass through the vessels.

22. No anatomical knowledge is requisite, as the compression is useful wherever undertaken. Displacement of the tube or girth is impossible in transport, if the ends have been well secured.

23. Tourniquets should therefore be replaced by elastic girths in the stores and in the dressing-bags of the men of the hospital corps.

24. Since caoutchouc suffers by being stored, and loses its elasticity, it is impossible to keep a store of these girths in the magazines; and, in the event of war, contracts would be badly carried out.

25. I have, therefore, given a necessary article of clothing the construction necessary for its double use as a brace and as an elastic tourniquet.

26. This tourniquet-brace consists of an India-rubber girth 150 centimètres (nearly 2 feet) long, and is strong enough to compress every vessel in a limb at any point.

27. Since every soldier must have a pair of braces, and this one is not dearer than any other, the desire that each soldier should be so equipped in war is a reasonable one.

28. In this case, every soldier would carry a means of checking a dangerous hæmorrhage, in himself and others, on his own person. In case of a severe injury he would, in any case, not require braces; and on the field of battle the braces of the dead and

wounded could be removed in great numbers if necessary.

29. These braces might also be used for tying-off poisoned wounds, for procuring artificial bloodlessness in operations, and for the resuscitation of the apparently dead after severe losses of blood, etc.

30. It is a matter of course that every wounded man, in whom hæmorrhage has been provisionally checked by the girth, should be brought to a lazarette as soon as possible, in order that the compression may be there removed, and the definite ligature of the bleeding vessel carried out.

31. It is also of importance that, before applying the elastic tourniquet, the limb be bandaged in an elevated position; and, if bones be shattered, that these should be rendered immovable during transport, by means of splints, etc.

F. WILLIAM ELSNER.

CAZIN ON THE DIAGNOSIS OF HIP-DISEASE BY RECTAL EXAMINATION.

DR. H. CAZIN (*Rev. de Chir.*, March 1882) refers to the difficulty of diagnosing the exact seat of the disease, especially with regard to the acetabulum. This difficulty is of much importance when the question of resection has to be considered, and is one of the strongest points of argument advanced by the opponents of resection. The author made researches in 98 cases of hip-joint disease, 64 being suppurative and 34 non-suppurative. Hitherto, only incomplete evidence has been obtained by depending upon the seat of the pain, the seat of abscesses and fistulæ, and by exploration with the sound.

Abdominal palpation enables us to detect enlarged iliac glands or pelvic abscesses; but if we also examine the patient through the rectum, the diagnosis will be much more sure. The hip-joint, from its deep position in the tissues, is not very accessible to ordinary methods of examination, but the finger can approach it most easily through the rectum. In the cavity of the pelvis, immediately above and a little behind the obturator foramen, is a quadrilateral surface of the bone, corresponding with the bottom of the acetabulum. In a child under fourteen years of age, this part of the pelvis is partly cartilaginous. The Y-shaped cartilage is so situated that the area of the base of the acetabulum is divided by a transverse line of cartilage into two equal parts, and the lower half is again divided by the horizontal line of cartilage.

In examining a patient, the natural extent of the cartilage should be considered, and the two sides should always be explored for the sake of comparison. This mode of examination has afforded appreciable results in 49 of the 98 cases which Dr. Cazin has had under observation. Of the 64 cases of suppurative hip-joint disease, positive results were obtained in 37. Of the 34 non-suppurative cases, in 12 only was the examination *per rectum* diagnostic. The ages of the patients were between three and eighteen years, and the majority were between eight and ten years; 41 were boys, and 23 girls. Examination *per rectum* disclosed an alteration in the pelvis in 36 of the cases. Sex has no importance with regard to the facility of examination. Among the elder girls, the presence of the uterus has caused very slight trouble, and the position 'on the knees' has facilitated the examination. In young adult females, recourse should be had at the same time, or exclusively, to examination *per vaginam*.

The results of Dr. Cazin's examinations have been verified six times by resection, four times by necropsy, and twice by resection and necropsy combined.

The symptoms elucidated by a rectal examination have been pain localised to the postcotyloid surface, produced by pressure; enlargement of the intra-pelvic glands; thickening of the bone; depression, flexibility, mobility, destruction, or perforation of the postcotyloidean surface; congestion of the soft parts; and pelvic abscess.

Pain upon pressure is the least certain of these symptoms. If the bone be penetrated, and the head of the femur be felt by the finger, a doubt in diagnosis may be removed if upon movement of the thigh the head of the femur is felt by the finger *(per rectum)* to move. Many cases are recorded. One was the case of a girl, thirteen years old, in whom there were some symptoms of hip-joint disease, but it was thought by one of Dr. Cazin's colleagues that contraction of the muscles was the only affection. Under chloroform the deformity disappeared, and the joint became freely movable; and it was only by a rectal examination, which disclosed a postcotyloidean swelling, that Dr. Cazin was convinced that articular disease existed. In conclusion, Dr. Cazin urges the adoption of this means of diagnosis, in addition to other methods, especially in reference to the subject of excision of the joint. He also maintains that *redressement forcé* should never be attempted until an examination *per rectum* has been made.

The only other surgeons who, Dr. Cazin states, have referred to this method of diagnosis in hip-joint disease are Mr. Holmes, in his work on *Surgical Diseases of Childhood*, and MM. Mathieu and Strauss, who have quoted Mr. Barwell.

E. NOBLE SMITH.

URBANTSCHITSCH ON THE APPRECIATION OF SOUND.

AN article on this subject, by Victor Urbantschitsch, appears in Pflüger's *Archiv für die Gesammte Physiologie*, Band xxiv.

1. *On Exhaustion of the Ear.*—A passing diminution in the acuteness of hearing occurs both in over-exertion by listening, as well as after the action of prolonged impressions of sound upon the ear. Having related the experiments of Dove and J. J. Müller in this department, the author shows that by the use of the sounds of a tuning-fork, which are carried to the ears alternately by India-rubber tubing, we can hear the sound produced and allowed to die away, on the one side, several seconds after it has ceased to be appreciated by the ear first acted upon (directly) on the other. The exhaustion of the ear, however, is confined to the one tone, and the same group of tones which caused the exhaustion; other tones being appreciated by the exhausted ear just as well and unchanged as by the unaltered one. An exhausted ear recovers its function in from two to five seconds.

2. *On the Subjective Field of Hearing.*—In addition to the observations of Purkyné, Thompson, and Plumandon, that by binotic conduction of one tone the perception of the same was referred to the occipital or frontal region, Urbantschitsch found by his experiments that these varying observations are accounted for, in the one instance, by the individual differences in the persons examined, in the other, by the choice of test-tones of different pitch and loud-

ness. In one case, the tone will be appreciated equally loudly in both ears ; in another, in the right or left temporal region, or even in the middle line of the head. The utmost limits of the subjective field of hearing are—the front occipital, and, from above downwards, the fronto-laryngeal regions. These limits were taken up on the one side by the lowest, and on the other by the highest test-tone. If two different tones be used in the experiment, of which each possesses its separate field of hearing, we do not thereby obtain an acoustic combination ; but each tone is perceived separately in its own region. As regards sounds, there is thus a great variety in the localisation of the subjective field of hearing.

3. *On the Positive Acoustic After-Images.*--Hitherto the only after-perceptions, in the same sense as optical after-sensations, known, were those grounded on exhaustion, corresponding to the negative optical after-sensations ; but by Urbantschitsch's experiments, the existence also of positive acoustic after-images has been proved. They are divided by him into two groups : 1. Primary, in which the subjective after-sensation is so intimately bound up with the preceding objective note, that both only produce a single uninterrupted hearing-impression ; 2. Secondary, in which there is a pause between the disappearance of the objective note and the appearance of the acoustic after-sensation. The duration of the acoustic after-images, which generally appear fifteen seconds after removal of the exciting note, is usually five to ten seconds. Different objective notes are perceived in the moment of after-perception, not as combined notes, but separated the one from the other. The researches of the author go to prove that the acoustic phenomena observed by him are to be designated as 'positive acoustic after-perceptions' (analogous to the optical after-images), and are to be well distinguished from the voluntary and involuntary acoustic remembrance-pictures which turn up and rest on a psychical process, and are certainly not true acoustic sense-perceptions (Fechner's pictures of sense-remembrance).

F. WILLIAM ELSNER.

JAKSCH ON THE RED COLOUR PRODUCED IN DIABETIC URINE ON THE ADDITION OF CHLORIDE OF IRON.

EVER since Gerhardt directed attention to the fact, it has been well known that, in many cases of diabetes, the urine became red on the addition of chloride of iron. The substance to which this reaction appears to be due is usually known under the name of ethyldiacetic acid. On the addition of water it breaks up into acetone, alcohol, and carbonic acid ; and as these substances are frequently present in diabetic urine, Gerhardt supposed that the substance to which the red reaction of the urine is due subsequently broke up into these three.

There are, however, other substances which, when present in urine, lead to a similar coloration on the addition of chloride of iron, among which may be mentioned salicylic acid and its salts. To distinguish the reaction of ethyldiacetic acid from that of other substances, Von Jaksch (*Zeitschr. für Heilk.*, Band iii) points out (1) that, when the urine is boiled for five or six minutes, the ethyldiacetic acid becomes decomposed, and no longer gives the red reaction ; and (2) that, when that substance s extracted from the urine by shaking with ether, and the etherial solution rendered red by the addition of the salt of iron, that red colour disappears gradually after standing for a few days. These reactions are sufficient to distinguish ethyldiacetic acid ; but a good many others are given, for which the original paper must be consulted.

The results of the clinical examination of a large number of urines are given with some detail. In regard to the iron reaction in diabetic urine, Von Jaksch points out the following facts. 1. In all cases where the patient died comatose, the urine gave the reaction. 2. The reaction occurred very frequently without any coma being present. Its presence does not depend upon diet, and particularly not upon the meat-diet of diabetics. 4. Neither the administration of such medicines as Carlsbad water, cod-liver oil, lactic acid, mannit, lichenin, nor of ethyldiacetic acid or acetone, caused the appearance of the red reaction in the urine.

Not only in diabetes, but also in scarlatina, measles, and other acute exanthemata, the author detected the presence in the urine of the substance which gives this red reaction.

J. GRAHAM BROWN, M.D.

BALDWIN ON THE POISONOUS PROPERTIES OF QUININE.

DR. W. O. BALDWIN (*Med. Gaz.*, Oct. 22) gives the following cases. The first case that led him to suspect that quinine was capable of producing poisonous effects, occurred in his own household. A manservant, coloured, aged 30, had an attack of acute pneumonia of the right lung, on the 25th October 1845, whilst Dr. Baldwin was temporarily absent from home. He was attended by a professional friend, who made copious notes of the case, from which it appears that the pneumonia was at no time violent. The patient commenced taking quinine at 5 o'clock P.M. on the 27th, and continued it until 1.30 P.M. on the 28th, during which time he took 68 grains. One and a half hours after the last dose of quinine, the doctor was called in and saw him at 3 P.M. He had a little while before been seized with a jerking motion of the whole body, which lasted several minutes, and immediately his vision was so imperfect that he could scarcely distinguish anything. The whole surface was hot ; respiration was irregular, from 11 to 20 ; pulse 100, full. The temporal veins were turgid, and the temporal artery throbbing. He had great restlessness, anxiety, and alarm ; his thirst was increased, his tongue more dry ; his pupils dilated. He dozed two or three minutes at a time, then started up, breathing more quickly and audibly. Cough was frequent and dry ; the respiratory murmur was heard over the greater extent of the whole lung. The convulsive movements of the body came on every ten or twelve minutes, sometimes apparently of the whole body, at other times confined to the arms. He was not insensible during the convulsions, nor was there foaming at the mouth, but occasionally a staring and vacant look, and rolling up of the eyes. By half-past 4 o'clock he was completely blind. His vision began to improve in about twenty-four hours, but it was never fully restored while Dr. Baldwin kept sight of him, which was about twenty years.

The agency of the quinine here, in producing blindness, convulsions, etc., is, Dr. Baldwin says, certainly most manifest. It was commenced at 5 o'clock on the evening of the 27th, and continued

until 1.30 o'clock P.M. of the 28th, being 20½ hours from the first dose to the last, during which time 68 grains were introduced into the system, the pernicious influence of which was visible one hour and a half from the last dose. The restlessness, tremors, slow and irregular breathing, dilatation of the pupils, blindness and convulsions, all supervening at the time they did, indicate most pointedly and conclusively the poisonous operation of the quinine.

The next case that led him to think that quinine was capable of producing poisonous effects, was one in which convulsions, blindness, and death, followed its use, when he supposed his patient to be convalescent. This was an attack of tertian remittent fever, which occurred in July 1846, in a negro girl, aged 6 years, living in a swampy and malarial district of country. The paroxysms came on early in the morning, and declined in the latter part of the succeeding day. He saw her on the fifth day of her disease, and during the earlier part of her third paroxysm of fever. Her bowels had been evacuated, and she had taken moderate doses of quinine during her last remission of fever. On the days of the exacerbation of fever, her pulse rose to 160, and during the remissions fell to 120. Within the first twenty-four hours after seeing her, he gave her 2 grains of quinine, at intervals of two hours, until 10 grains had been given, and repeated the same doses at intervals of four hours until a like quantity had been taken, making 20 grains within forty-eight hours. At his visit on the third day of his attendance, he found that the exacerbation of fever had not come on, though she was suffering from extreme restlessness, from what he supposed to be a high state of quininism, but almost free from fever. He therefore determined to withdraw the remedy, and gave directions to that effect. On returning next morning he found, to his great surprise, that his patient was dead; and the nurse gave the following account of her.

Soon after Dr. Baldwin left on the previous day, the nurse found her 'in a free, warm, and general perspiration, which lasted three or four hours'. On discovering this, he concluded she was in a good condition for taking quinine, and gave her 4 grains, and repeated the dose three hours afterwards, making 28 grains in all, during a period of something less than two days and a half. Shortly after he gave her the last dose, her skin became dry, succeeded by increased restlessness. About 6 o'clock she had a convulsion. After this, he noticed that the pupils of her eyes were dilated, and soon discovered she was totally blind. When asked if she knew her mother and other persons who were placed before her in a bright light, during the intervals of her convulsions, she would roll her eyes about—apparently endeavouring to fix them on some object—and then she would say, 'I can't see them'. The dilatation of the pupils, blindness, restlessness, convulsions, etc., continued until 8 o'clock, when she died.

Dr. Baldwin could not make a thorough *post mortem* examination, his patient being five miles from the city. Consequently, he made a partial one only of the stomach and bowels. Considerable vascularity was found in portions of the small intestines and stomach, the former containing of a yellowish and greenish substance intimately blended with mucus; no worms. The pupils were enormously dilated.

A review of this case left no doubt upon his mind of the direct agency of the quinine in producing death. The quantity given immediately before death (8 grains) would not of itself have produced the fatal result, separate from the agency of that which had been given previously; but it must be remembered that, at the time when these last portions were given, the system was still charged with quinine to the extent of cinchonism; for up to 4 o'clock that morning it had been regularly introduced into the stomach, at intervals, for nearly two days. The accession of fever, which should have taken place on the day before, was prevented. The patient either died from the effects of the quinine; or the paroxysm of fever, which had been arrested or suspended, supervened on the day of her death and killed her. The latter could not have been the case, for an hour or two before she commenced taking the quinine (the last time), she was in a warm, free, and diffused perspiration, and evidently cinchonised. The most conclusive evidence, however, that the quinine killed the patient, is the characteristic train of symptoms which immediately followed its administration and preceded death, viz., the extreme restlessness, dilatation of pupils, blindness, and convulsions.

In other accidents of the kind which have been reported by authors, the symptoms do not differ in any prominent particular. The reader is especially referred to an article in the twenty-sixth volume of the *Dictionnaire de Médecine*, on Quinquinia, by Guersant, where several cases of the kind are recorded as having occurred under the observation of M. Trousseau, Dr. Guicometti, and others.

BINZ ON ANTIPYRETIC MEDICINES: THEIR ACTION AND USES.

PROFESSOR BINZ, in a paper read before the International Medical Congress, 1881, says:—

1. In the present state of our knowledge, there are two modes in which antipyretic remedies may be conceived to operate: first, by increasing the discharge of the pyrexial heat; secondly, by checking its production.

2. The quantity of heat discharged may be augmented by direct withdrawal (tepid water), or by facilitating the circulation through the skin (digitalis, cutaneous irritants).

3. The production of heat may be lessened by repeated cooling of the surface, and especially by the internal use of antizymotics.

4. Febrile diseases commonly owe their origin to the introduction and rapid development of substances akin to ferments. Several of these have been shown to resemble yeast in being low vegetable organisms, or derived from such organisms. They enter the glands, where they undergo multiplication, increase the metabolic processes, generate products of decomposition which exert a paralysing action on the nervous system, and raise the standard of temperature throughout the body.

5. Owing to impaired action of the heart in certain stages of the disorder, or to contraction of the cutaneous vessels, the skin becomes anæmic, and gives off less heat than usual. The internal temperature rises accordingly.

6. Quinine, our chief antipyretic, acts by directly combating the efficient cause of the disorder, and by checking the abnormal metabolism going on in the body. The nervous system takes no part, or only a secondary part, in this operation. In intermittent fevers, quinine prevents the paroxysms by attacking their infective cause. The paroxysms are not the essence—the substantive element—of the disease; they are only a symptom of it. The substantive

element is the poison deposited in the colourless corpuscles of many organs, especially the spleen. There are fevers without paroxysms, and paroxysms without fever. It is just those intermittent fevers which run their course without paroxysms that are the most malignant. The malarial poison rapidly causes disintegration of the tissues and the blood, and so paralyses the nerve-centres.

7. The reduction of acute splenic tumours by quinine depends upon the adverse influence exerted by the alkaloid on the infective poison to which the morbid over-action of the spleen and its consequent enlargement are due. '*Cessante causâ cessat effectus.*' Even a healthy spleen may be reduced in size by large doses of quinine; the alkaloid vigorously checking the oxidation of its principal elements, the colourless corpuscles. Quinine has no direct influence on the vaso-motor nerves.

8. Quinine attacks the malarial poison with especial energy; on this fact depends the so-called specific action of quinine in intermittent fevers. The same relation, but in a minor degree, subsists between quinine and the infective poison of enteric fever, between mercury and iodine and the poison of syphilis, between salicylic acid and the 'irritant' in acute articular rheumatism.

9. An antipyretic which, in one disease, instantaneously arrests the fever, may be wholly powerless in another. The difference depends on the fact that the various antizymotics act very unequally on the individual schizomycetes and ferments; one will paralyse them rapidly, by another they will hardly be affected.

10. The past history of therapeutics, and recent achievements in the domain of etiology and pharmacology, entitle us to assume that, by persistent scientific inquiry and practical observation, we may succeed in discovering a specific antidote for every species of infective or septicæmic malady.

FERNET ON DIGITALIS IN CARDIAC DISEASES.

AT a meeting of the Société de Thérapeutique in Paris, M. Fernet submitted his views on the use of digitalis in heart-disease, accompanied by valvular lesions (*Jour. de Thérap.*, May 25). He said that, whatever may be its physiological action, the effects of digitalis administered to certain patients with cardiac affections are really reduced to the slackening of the contractions of the heart, to the regulation and the augmentation of energy of these contractions, and, finally, to the increase of the amount of urine. The decrease or disappearance of the visceral congestions, dropsies, and all the concomitant symptoms, depends on the modifications of the circulation. Digitalis is, therefore, indicated in cases in which the contractions of the heart are hurried, irregular, unequal, and in which the quality of the urine is notably decreased. In aortic disease, the muscular structure of the heart is slowly attacked, the pulse is full, regular, and equal; there are no visceral congestions nor dropsies; the urine is copious. Palpitations and breathlessness supervene under the influence of fatigue, effort, and emotion. These symptoms are soothed by rest, the use of bromide of potassium, or morphia. Digitalis is not indicated. In the ultimate asystolia of aortic lesions, digitalis would be dangerous, whilst tonics and stimulants are specially indicated. In mitral disease, digitalis is useless at the compensation period, and should be reserved for the asystolic, or, rather, as M. Fernet terms it, the dyssystolic period. Towards the end, when the heart is definitively asystolic, digitalis cannot produce a better utilisation of strength which no longer exists. It is by tonics, stimulants, and, notably by morphia or subcutaneous injection of ether, that the struggle may be prolonged. Gubler, who discerned very various morbid states lying behind the asystolic symptoms, some corresponding to ataxy, others to paralysis, united the former under the name of cardiataxy, the latter under that of cardioplegia. He pointed out that digitalis is useful only in cardiataxic disorders, and is powerless, or even injurious, in cardioplegic diseases. Amongst preparations of digitalis, M. Fernet prescribes by preference the infusion of leaves in doses of 20 centigrammes to 150 and 200 grammes of water, taken several times during the day between meals. Small doses are sufficient, and act as well as large doses, without any danger of poisoning. The infusion should be administered during from four to five days only. During the two or three first days of treatment, no appreciable effect is observed. The action of digitalis first shows itself by the regulation of the pulse, which precedes diuresis generally from fifteen to eighteen hours. This happens most often suddenly during the night, between the third and fourth days, when the patients are submitted to the product for the first time. On the days when the digitalis is suspended, the diuresis persists and even increases, to reach its maximum on the fifth day. The patient then evacuates five or six pints of urine. The diuresis is, as it were, the touchstone of digitalis; the urinal, according to M. Fernet, is to certain mitral diseases what the thermometer is to febrile diseases. Dyssystolic symptoms reappear, as soon as the patient excretes less than one litre of urine in twenty-four hours.

SQUIBB ON MEDICATION BY SALICYL COMPOUNDS.*

THE recent discussion by the Medical Society of London on the use of salicyl compounds in rheumatism brings forward anew two or three important points, which it leaves unfinished. 'More than a thousand cases of rheumatic fever' were treated with salicyl compounds, embracing salicine; salicylic acid made by Kolbe's process, from carbolic acid; salicylic acid made from oil of wintergreen; and salicylate of sodium made from Kolbe's salicylic acid. Toxic symptoms occurred in a considerable proportion of the cases treated with the Kolbe acid, and with salicylate of sodium made from that acid; but in the large number of cases reported by Dr. Latham of Cambridge, where the acid made from oil of wintergreen was used, these toxic symptoms were practically absent. This led to or strengthened the inference that there were impurities in the Kolbe acid, which produced these disagreeable symptoms. In the *Pharm. Jour. and Trans.* of April 6, 1878, p. 785, Mr. John Williams, F.C.S., shows conclusively that there is, or was at that time, another acid occasionally or commonly present in the Kolbe acid to the extent of 15 to 25 per cent., and that this acid formed a contaminating sodium salt. In the subsequent discussion of the subject, this acid and its sodium salt were very generally believed to be the sources of the toxic symptoms.

* *Ephemera of Materia Medica*, vol. i, No. 3, May 1882.

The experience in America has, in a desultory inexact way, confirmed this, although within this writer's observation it has been sometimes difficult to decide whether the toxic symptoms were due to over-dosing, or to the contaminating acid. As a rule, salicyl compounds are rapidly eliminated, and, therefore, the effects are of comparatively short duration. This point has been too much overlooked in the use of these compounds, especially in Great Britain. It leads directly to the necessity for moderate doses frequently repeated. The English practice, as deduced from the late discussion, seems to have been to give from 60 to 180 grains in the twenty-four hours, divided into three or four doses, occasionally in six doses, and still more rarely in eight doses. In the United States, the best practice seems to have been in better conformity to the rate of elimination, for it is common to hear of its use every two hours, or every three hours—that is, twelve, or eight times in the twenty-four hours. The doses of either the acid or the sodium salt are, perhaps, usually 20 grains at first; then 15 grains until the pain begins to abate, and then 10 grains or less; but always with frequent repetition. Such practice would indicate that somewhat less of the medicine is used in a given case, but in larger doses at first, and always more frequently repeated. The acid, however pure, is more apt to disturb the stomach primarily than the sodium salt; but in equivalent doses they seem equally liable to produce perversion of the special senses and delirium. Ringing in the ears seems to be for salicyl compounds, as for quinine, the indication of saturation, or of full physiological effect. Next comes disturbed or perverted vision, and finally delirium. If, as with quinine, the dose be reduced on the first appearance of ringing in the ears, the other symptoms will not occur, and the medicine need not be suspended. The parallelism with quinine, strychnia, atropine, etc., is also noticeable in the circumstance that, when the full physiological effect is reached, larger or more frequent doses are hurtful or toxic; and of still more importance the circumstance that the full physiological effect is reached in different persons by widely different quantities. This latter consideration is so often neglected in therapeutics that the stated doses of medicines are not regarded simply as quantities to begin with, but are carried from patient to patient, and throughout case after case, without regard to differences in individual susceptibility and individual rates of elimination. If in two persons equally susceptible to a medicine—say salicyl compounds—the rate of elimination be different, either naturally or temporarily, the same full physiological dose will in one case be therapeutic only, while with slower elimination it will be cumulative until a toxic explosion occurs.

Hence, in any consideration of the toxic effects of salicyl compounds, it is manifestly unsafe to charge them all to impurities in the medicine, when idiosyncrasy brings into operation two other important causes of similar effects, namely, different susceptibility and different rate of elimination, under which conditions the moderate or small doses of one case become excessive in another.

While, then, it may be fairly assumed that, in a proportion of the cases where the medicine had to be suspended on account of toxic effects, these were due to over-dosing, yet a very large proportion may be as fairly attributed to the contaminating acid.

In some rather roughly made observations on the subject, soon after Mr. Williams' paper was published, the writer came to the conclusion that the contaminating acid was most largely present in the amorphous acid, and that in well crystallised acid it was not present to the extent of more than six to eight per cent., and further, that sublimation freed the salicylic acid from this contaminating acid. Within the last two years, however, the markets have been supplied for those who chose to pay for it with a well crystallised acid, which does not contain more than three or four per cent. of all impurities. Such an acid is all that can be needed for medical uses, and is quite as pure as any made from oil of wintergreen; and any toxic effects from such an acid, or from the sodium salt made from it, must be due either to idiosyncrasy or to mismanagement. A well made sodium salt from such an acid is always white, but after being shut up long in a bottle is liable to have a faint odour of carbolic acid. This, however, should be so faint as only to be perceptible on close examination, and should not be perceptible after exposure to the air for a time, nor in the solutions.

The salicylate of sodium having now pretty generally, and very properly, superseded both salicine and salicylic acid for medicinal uses, it becomes quite important to know when it is of good quality. This is the more difficult, because its appearance and sensible properties give no indication, and because any chemical examination or testing, in order to be conclusive, must be elaborate and troublesome. It is made by the careful saturation of a solution of a pure carbonate of sodium with good salicylic acid, and the evaporation of the solution to dryness by a carefully regulated heat, with constant stirring. The process, though not difficult, is tedious and troublesome, and, therefore, with the proper skill is rather expensive. The salt is never used in substance, but always in solution, and, therefore, when redissolved, all the trouble and expense of the drying process is lost. Therefore, as salicylic acid is much more easily judged, both by appearance and by tests, than salicylate of sodium, and is much easier to get of assured quality, it is far better to save all risks of impurity and expense by making the solution for use as wanted. That is, each pharmacist or physician should make it for himself extemporaneously as wanted. Several formulæ have been published by which to do this, but all have needed the detai necessary to those who might not be accustomed to such work.

Each 100 parts or grains of medicinal salicylate of sodium consists of about 89 of the acid and 11 of sodium, both elements taken as hydrates; and the average dose of the salt to begin with, or to test the susceptibility of a patient, is 20 grains every two hours. The average case of acute rheumatism will, perhaps, require the use of the salicylate for fifteen days, at an average of 80 grains a day, or 1,200 grains in all, consisting of 1,070 grains of the acid and 130 grains of base. This is best made up by using an ounce-bottle of salicylic acid at a time, about 2¼ ounces being needed to the average case. The ounce-bottle of acid will contain about 437 grains, and this will require about 270 grains of bicarbonate of sodium, and will yield about 490 grains of the salicylate of sodium. A very convenient solution is one which contains 10 grains in each fluid drachm; and of such a solution, one avoirdupois ounce of acid would make six fluid ounces and one fluid drachm. This is easily and quickly made by the following formula. Take of salicylic acid, well crystallised, 437 grains; bicarbonate

of sodium, 270 grains; water, free from iron, a sufficient quantity. Put the acid into a vessel of the capacity of a pint, add four fluid ounces of water, stir well together, and then add the bicarbonate of sodium in portions, with stirring, until the whole is added and the effervescence is finished. Filter the solution, and wash the filter through with water until the filtered solution measures six fluid ounces, or 180 cubic centimètres.

This solution contains 10 grains of the medicinal salicylate of sodium in each fluid drachm.

If made from good materials, the solution before filtration is of a pale amber colour; but, as most ordinary filtering paper contains traces of iron, the filtered solution is often of a deeper tint. Owing to the varying proportions of hygrometric moisture in the materials, the solution may not always be perfectly neutral, but it must be nearly so, and quite near enough for all practical purposes, as both elements are medicinal in the same direction. When the alkaline base is in excess, however, the solution soon becomes of a much deeper colour. The carbonic acid (carbon dioxide) present in the solution is not only of no disadvantage, but is a positive advantage, since it improves the taste, and renders the solution more acceptable to the stomach. It, however, interferes with the testing by litmus paper for the neutrality of the solution, unless the moistened paper, both blue and red, be exposed to the air a short time before judging of the coloration.

In this way, an ounce of crystallised salicylic acid, costing, say, twenty-five to thirty cents, and the bicarbonate of sodium, costing less than one cent, will make about 480 grains, or 1.1 avoirdupois ounces of the salicylate, and any physician or pharmacist can make the solution.

In common with other bitter and nauseous salines, it is best taken simply diluted with ice water. A mouthful or two of ice-water before and after the dose to blunt the sense of taste, and the dose between them in the proportion of two fluid drachms of the solution in a wine glass full of ice-water, renders it easily taken by most persons. In acute cases, it should be taken every two hours at first, or in urgent cases every hour, until very moderate saturation occurs. Then the dose should be diminished before the intervals are lengthened; and, finally, the intervals should be lengthened, first to three hours, and then to four hours, but it should not be omitted until the usual time and risks of relapse are past. In chronic cases, one fluid drachm of the solution every two or three hours during two or three days will probably do all that the medicine is capable of if the patient have the ordinary susceptibility; but it cannot fairly be said to have failed until the full physiological effects have been obtained without abatement of the symptoms.

THERAPEUTICS AND PHARMACOLOGY.

RECENT PAPERS.

1. FORSTER.—Veratrum Viride in Cardiac Irritability. (*Brit. Med. Jour*, April 1882, p. 534)
2. MACKENZIE.—The Treatment of Chronic Dysentery by Enemata of Nitrate of Silver. (*Lancet*, April 1882, p. 640.)
3. SQUIRE.—The Treatment of Diabetes. (*Practitioner*, May 1882.)
4. MACAULAY.—Ergot in Diabetes Insipidus. (*Lancet*, April 1882, p. 686)
5. DEWAR.—Ergot in Pertussus. (*Practitioner*, May 1882)
6. SHORTT.—Liquor Potassæ in Snake-Bites. (*Lancet*, May 1882, p. 725)
7. STEVENSON.—Eucalyptus in Leprosy. (*Lancet*, May 1882, p. 730)
8. HUCHARD.—Nitrate of Pilocarpine in Hysterical Hemianæsthesia. (*Jour. de Méd. et de Chir*)
9. VAN OYE.—The Action of Carbolic Acid on Fever Patients. (*Jour. de Ther.*, 10th Feb. 1882.)
10. BALL.—The Bromides in Epilepsy. (*Jour. de Méd. de Paris*, Jan. 21.)
11. YOUNG.—Agaricus in the Night-Sweats of Phthisis. (*Glasgow Med Jour.*)
12. DUCROUX.—Polyuria and its Treatment by Pilocarpine. (Paris, 1882.)
13. ANDREU.—Pyrogallic Acid in the Treatment of Venereal Ulcers. (*Thèse de Paris.*)
14. EVERETT.—Inhalation of Cold Air in Pneumonia. (*New York Med. Record*)
15. SCHUSTER.—On Mercuric Soap.
16. CANTANI.—Sulphuretted Hydrogen in Tuberculosis. (*Centralbl. für die Med. Wiss.*, No. 16, 1882)
17. ROBIN.—Cantharidism. (*Jour. des Sciences Méd. de Lille*, April.)

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1. *Forster on Veratrum Viride in Cardiac Irritability.*—Mr. E. Wood Forster, in the *Brit. Med. Jour.*, April 1882, p. 534, relates a case of a youth suffering from extreme cardiac irritability, accompanied with slight hypertrophy, in whom three doses of veratrum viride proved highly beneficial after digitalis had failed to give relief.

2. *Mackenzie on the Treatment of Chronic Dysentery by Large Enemata of Nitrate of Silver.*—In the *Lancet*, April 1882, p. 640, Dr. Stephen Mackenzie reports four severe cases of chronic dysentery, which were rapidly and effectually cured by one, or at the most two, injections of nitrate of silver, in the proportion of one drachm of the nitrate to three pints of water. [A reference to the *Med. Digest*, sec. 904, 4, will show that twenty years ago this plan was much more frequently employed than it has been of late years. It was found to be equally efficacious in acute and in chronic cases. In the *Lancet*, June 1876, p. 911, a case is reported in which several American medical men introduced a speculum into the rectum under anæsthetics, and freely cauterised the mucous membrane as high as they could reach, and with marked success.—*Rep.*]

3. *Squire on the Treatment of Diabetes.*—Dr. Wm. Squire, in a very suggestive paper in the *Practitioner*, May 1882, p. 346, makes, among others, the following remarks. Bethesda waters are utterly valueless. The value of codeia is beyond dispute. Moisture is restored to the skin by two or three drops of carbolic acid in an ounce of water, given three or four times a day for short periods. A similar solution, sprayed into the fauces, relieves the dryness of the mouth and throat. This solution of carbolic acid should always be given during an intercurrent abscess or boil, for two days before any incision is made, in diabetic subjects. In one form of albuminuria, coexisting with diabetes, viz., where there is parenchymatous nephritis appearing in the course of typical diabetes, milk must be absolutely forbidden. Grave anxiety, caused by the persistence of both sugar and albumen, has been shortly relieved after the milk has been stopped, and cream exclusively substituted. An agreeable cheese-cake may be prepared in the following way. Grate one ounce of bread with the rind of two lemons, and mix with

half an ounce of glycerine; with this whisk up the whites of three eggs, two ounces of cream, and one of fresh butter, melted by heat; add also the juice of two lemons, and the yolks of three eggs, well beaten; mix all together, and bake, in ramakin cups, for about twenty minutes in a rather quick oven. A little more glycerine, or a little less lemon juice, will modify the flavour and consistence of this confection. It is to be eaten when cold.

4. *Macaulay on Ergot in Diabetes Insipidus.*—Mr. S. Macaulay, in the *Lancet*, April 1882, p. 686, reports another case, showing the great value of ergot in this disease. (*Vide* LONDON MEDICAL RECORD 1880, p. 231, and 1881, p. 12.)

5. *Dewar on Ergot in Pertussis.*—Dr. John Dewar, in the *Practitioner*, May 1882, p. 358, draws attention to the great value of the liquid extract of ergot in whooping cough, in which disease he believes it to be the best and safest of all remedies. [In the *Edinburgh Med. Jour.*, 1863, Dr. Griefenkel reported a case of a lad, six years old, who was cured of whooping cough in eight days. (*Vide Med. Digest*, sec. 715, 4.) During the last week, in the reporter's practice, a child of eighteen months, not progressing well under the belladonna treatment, was vastly relieved after a few 5-minim doses of Battley's liquid extract of ergot.—*Rep.*]

6. *Shortt on Liquor Potassæ in Snake-Bites.*—Dr. John Shortt adds several to the numerous cases he has previously reported, in which liquor potassæ, internally and externally, combined with brandy, has succeeded in effectually curing patients bitten by venomous snakes. (*Vide Lancet*, May 1882, p. 725). [Dr. Shortt communicated to the *Lancet*, May 1870, p. 540, a very valuable paper upon this mode of treatment, as well as to other journals of subsequent dates.—*Rep.*]

7. *Stevenson on Eucalyptus in Leprosy.*—In the *Lancet*, May 1882, p. 730, Mr. Edward Sinclair Stevenson speaks very confidently of the good results he obtained in a case in which he gave liberal doses of the tincture of eucalyptus. R. NEALE, M.D.

8. *Huchard on Nitrate of Pilocarpine in Hysterical Hemianæsthesia.*—Dr. Huchard (*Jour. de Méd. et de Chirurg.*) remarks that hysterical hemianæsthesia is generally a symptom which is very intolerant of any treatment; and if it yield to the employment of metals, of the magnet, or of static electricity, it generally reappears after a short time. In the cases of patients, two of whom had hemianæsthesia, and one total anæsthesia, M. Huchard had recourse to injections of nitrate of pilocarpine. Up to the time of the report, however, the case of total anæsthesia had only become transformed into hemianæsthesia, while in the other two the hemianæsthesia has disappeared. An abridged description of one case is as follows. A girl, seven years of age, nervous and impressionable, subject to convulsive crises nearly every month, presented hemianæsthesia of general and special sensation on the right side, with ovarian hyperæsthesia and slight amyosthenia of the same side. Before injection, it was found by the help of a special thermometer, and contrary to what has hitherto been noted, that the temperature on the anæsthetic side was two-tenths of a degree Cent. (0.36 Fahr.) higher than on the healthy side. After two injections of pilocarpine, made at an interval of two days, the local temperature was carefully taken by the house-surgeon, M. Binet, on eight different occasions in sixty-five minutes. It was found that the local temperature rose gradually under the influence of injections of pilocarpine, with a tendency to become equalised on both sides during the period of increase. The acme was attained about forty minutes after the first injection, performed at the level of the thighs; and the next day at the end of fifteen minutes only, after an injection had been made in the upper part of the body. During the acme the difference of temperature seemed to be greatest in the lower limbs, where it reached nine-tenths of a degree Cent. (1.62 Fahr.) In the upper part of the trunk, the difference remained as it was at the beginning. The quantity of sweat collected was sensibly equal on both sides, and two injections of pilocarpine were sufficient to bring back sensibility on the anæsthetic side; this result lasted until the patient left, nine days after this treatment had been used. In another patient affected with total anæsthesia and with contraction of the left leg, sensation returned on the right side, and lasted up to the time of the report at the end of a fortnight.

9. *Van Oye on the Action of Carbolic Acid on Fever Patients.*—Dr. Van Oye's thesis, published at Paris in 1881, contains the following conclusions on this subject (*Jour. de Thérap.*, 10th February 1882). Carbolic acid is a poison of the nervous system, and possesses in the highest degree the property of lowering the temperature of man and the higher animals. Doses of carbolic acid, without appreciable action on the normal temperature, are sufficient to lower the febrile temperature. This lowering is produced in febrile patients whether suffering from simple inflammation, or from infectious pyrexia. It commences very soon after the absorption of the medicine, and its extent varies, according to the dose, from one to three degrees, and its duration from one to three hours. Its probable cause is the loss of heat, resulting from the cutaneous hyperæmia, and the more or less abundant sweats which coincide with its production. A rigor and all the phenomena of the febrile state supervene, when the antipyretic action of the preceding dose is exhausted. At the same time the temperature rises suddenly to its original level, and even above it. A new dose may interrupt this attack, and even prevent it if the medicine be administered in time. Doses which are sufficient to produce the entire useful antipyretic effect do not exercise any injurious toxic action on a fever patient. Fifty centigrammes administered by the rectum are sufficient in all cases at the outset. As a rule, doses of two grammes may be gradually reached. One gramme given at once, has, in some patients of special susceptibility, been sufficient to produce a lowering of temperature to the extent of 34.5 deg. Cent. (94.1 Fahr.) This exaggerated depression has not in any case been injurious to the patient. Pulmonary congestion is a danger to be feared and avoided in the use of carbolic acid. Dr. Van Oye has pointed out albuminuria, polyuria, and fatty degeneration, as the possible effect of strong doses greatly prolonged. The antipyretic properties of carbolic acid should, the author says, be reserved to overcome high temperature in continued fever, and to prevent the paroxysms in intermittent fever.

10. *Ball on Bromides in the Treatment of Epilepsy.*—A combination of bromides has long been recommended in epilepsy. The experience of Brown-Séquard was to this effect, and his formula is in constant use in the present day. It is as follows: Take iodide of potassium, one drachm; bromide of potassium, one ounce; bromide of ammonium, two-and-a-half drachms; bicarbonate of potash, two scruples;

infusion of calumba, six ounces. Mix. One drachm before each meal, and three drachms at bed-time. In the *Jour. de Méd. de Paris*, January 21, 1882, Professor Ball recommends the use of the alkaline bromides, particularly those of ammonium and sodium, with belladonna and oxide of zinc. He administers these bromides of each 10 parts in 300 of water, commencing with teaspoonful-doses four times a day, and increasing up to eight or ten doses daily, if the treatment be not followed by improvement within a few days. The belladonna and the oxide of zinc are given in pill form, 15 grains of each being made up into forty pills, and of these, two are taken daily, one in the morning and one in the evening; four pills can be given daily in rebellious cases without causing any inconvenience. For many reasons he prefers this double salt to the other bromides; it does not produce the headache or torpor generally following the prolonged use of the bromide of potassium, and even when a cure is not produced the double bromide diminishes the frequency and intensity of the attacks, even in cases where the bromide of potassium has failed. The eruption following the use of the potassium salt is rarely seen when the double bromides are used.

11. *Young on Agaricus in the Night-Sweats of Phthisis.*—Mr. J. M. Young (*Glasgow Med. Jour.*) classifies the results of his observations as follows. 1. Night-sweating becomes proportionately lessened according to the amount of the drug administered; and, if sufficient doses be given, becomes effectually checked or prevented, according to the time of administration. This was observed to be the absolute rule in all moderate cases of phthisical night-sweating where it was tried; and in one case, where the sweating was colliquative, agaricus brought the sweating within moderate limits. In other cases of sweating not dependent on phthisis, the drug was found to work well; indeed, its most notable effect was observed in the case of a patient who had sweating of the right side of his body and right leg persistently at night for eight months, and in which a dose of ten grains stopped the symptoms for a night almost at once. In the quickness of its action, agaricus resembles atropia. Like atropia, too, the effect is not permanent. 2. The effect of the drug against sweating is not more marked than its effect in promoting sound sleep, and relieving troublesome cough, especially of phthisis. This is the most notable fact to the patients themselves, a gradually increasing feeling of drowsiness following its administration in most cases. The antihydrotic and soporific effects of the drug are probably distinct from one another, and not to be related as cause to effect, since, in some of the cases observed, sweating was always complained of as occurring during sleep, the body being covered with perspiration on awakening. Cessation of cough may, however, be the result of soundness of sleep. 3. Strict investigation seemed to show that the drug has considerable influence in reducing the temperature, in cases of phthisis at least, where the fever is unstable, as much as two degrees of a fall having been observed with half-an-hour after administration of 1-12th of a grain of agaricine. Such a marked result was not always obtained by repetition of the experiment in different cases; but the fall observed in this way averaged 1.4 deg.; and had its expression in a relieved feeling on the part of the patient. Along with the effect on temperature, it may be noted that the rate of the pulse becomes usually reduced to a corresponding degree; but this effect has not been invariably noticed.

12. *Ducroux on Polyuria and its Treatment by Pilocarpine.*—Dr. Ducroux, in an essay on this subject (Paris, 1882) points out that polyuria may constitute an essential affection, with more or less abundant elimination of urea, oxalates, and phosphates, or may be only the symptom of another disease, interstitial nephritis, diabetes mellitus, or cerebral hæmorrhage. Essential polyuria is principally met with in adolescence and childhood; in old age, symptomatic polyuria is more often met with. It is especially in children and adults that the former shows itself, because at that age the nervous condition predominates, which, according to Lecorché, is one of the predisposing causes, in the same way as are scrofula, alcoholism, syphilis, arthritis, hysteria, and heredity. Other causes which have been pointed out are chills, mental disturbances grief and fatigue. In chronic polyuria, the quantity of urine may rise to 35 to 50 pints in a day. The progress of this affection is variable. It may be acute and cease spontaneously, or it may pass into the chronic state and be of life-long duration. Examination of the urine is the only means of ascertaining whether the case be one of simple azoturic, phosphaturic, or oxaluric polyuria, or if the patient be suffering from diabetes mellitus or from nephritis. The diagnosis from interstitial nephritis sometimes presents great difficulties. Since, in polyuria, the functions of the skin are generally very badly performed in consequence of the disturbance of the balance between the sudorific and renal secretions, it was natural to think that jaborandi, and especially its alkaloid pilocarpine, as a consequence of their sudorific action, would diminish the amount of urine in simple polyuria, and consequently lower the amount of urea eliminated in azoturic polyuria. M. Albert Robin has, in fact, already pointed out that urea always decreases in the urine under the use of jaborandi or its alkaloid, and that this decrease oscillates between about 7½ and 150 grains; after the action of the drug, the urea regains its normal standard. It now remains to analyse the sweat, and to find if the urea, the salts, and the extractive matters, which, under the influence of the drug, are eliminated in a smaller quantity by the urine, are not found in more than normal quantity in the perspiration. The sweat obtained by administration of pilocarpine contains, according to M. Albert Robin, from 50 centigrammes to 2.9 grammes of urea per litre, instead of 40 centigrammes, stated by Favre to be the amount for normal sweat. It likewise contains an excess of chlorides. M. Huchard, at the commencement of last year, first used pilocarpine in polyuria, and it was in his wards at the Tenon Hospital that M. Ducroux collected the seven cases published in his thesis. M. Huchard employed nitrate of pilocarpine in hypodermic injections of from one to two centigrammes (0.15 to 0.3 grain). A daily injection was given during from three to five consecutive days; then they were suspended during the same interval of time, and again continued in the same fashion. In certain diseases the medication was of necessity suspended for a longer time, in consequence of the fatigue produced. At other times these intervals, though necessary, were very irregular. The appetite was generally not so good during the whole course of the treatment; but no patients lost flesh. The results of this new medication, summarised from the author's seven instances, are as follows. Pilocarpine brought on complete cure in two cases of azoturic polyuria, one essential, the other symptomatic of nephritis. In the latter case, it even led to the disappearance of a

very marked amblyopia. In two cases of simple polyuria; it brought on a decrease of the quantity of urine, and a decided improvement in the general symptoms. It was powerless in a case of saturnine polyuria, in one of chronic essential polyuria of long standing, and in one of scrofulous polyuria with cachexia, in which the patient could not tolerate it. These cases are not as yet sufficiently numerous to exactly indicate those forms of polyuria in which it is advisable to use pilocarpine; but it is now well established that this troublesome affection is often influenced in the happiest manner, or even cured, by this treatment. M. Ducroux records that M. Huchard has tried pilocarpine in doses of five milligrammes (0.75 grain), at night for the nocturnal sweats of phthisical patients, and has often seen them decrease, or even completely disappear, after having resisted atropine. Relapses occurred, but they also happen with other forms of treatment.

13. *Andrieu on Pyrogallic Acid in the Treatment of Venereal Ulcers.*—Dr. Andrieu (*Thèse de Paris*, 1881) says that pyrogallic acid has been introduced into therapeutic use by Dr. Jarisch of Vienna. Since then M. Vidal at Saint-Louis, and M. Terrillon at the Lourcine Hospital, have applied it successfully to the treatment of soft chancre. The formula used at the Lourcine is as follows: Starch, 40 grammes; vaseline, 120 grammes; pyrogallic acid, 40 grammes. This ointment should be used fresh, and kept in a stoppered bottle. To remedy the inconveniences of dressing venereal ulcers with fatty bodies, M. Terrillon has substituted for the ointment a powder composed as follows: Pyrogallic acid, 80 grammes; starch, 80 grammes. This powder is blown on the part by means of a small bellows. Nevertheless, a certain number of cases reported by Dr. Andrieu in his thesis tend to show the superiority of the ointment over the powder. If one application be made daily, the duration of the treatment is notably abridged, in comparison with the methods generally employed. It is sometimes necessary, when the ulcer is very extensive, to make two applications; but the latter is the exception. After the second application, the chancres will have lost all their virulence.

14. *Everett on Inhalation of Cold Air in Pneumonia.*—Dr. J. T. Everett of Sandusky, Ohio (*New York Med. Rec.*), states that the continuous inhalation of cold air, ranging from 10 deg. to 15 deg. Fahr., while the patient is kept in a room with a temperature of from 80 deg. to 85 deg. Fahr., will, in the early stage of pneumonia, act as an abortive, and bring the disease to a speedy termination. His explanation is that the cold air, coming into direct contact with the tissues of the pulmonic parenchyma, extracts heat from the blood; and by carefully noting the external temperature and that of the patient, this abstraction of heat can be regulated with the utmost nicety and precision—can be commenced or stopped instantly, without prostrating the nervous system by sedatives or narcotics, and without the loss of blood. This cold air, in thus coming into contact with the lung-tissue, causes contraction of the vessels, thus lessening the amount of blood admitted to the lung-tissue, and by its constringing influence tends to drive out that which has become partially deposited by the stasis, while, by increasing the oxygenation of that already admitted, it hastens resolution. The increased heat of the air surrounding the patient favours copious perspiration, thus by the evaporation process favouring the additional abstraction of heat. In winter, when the out-door atmosphere is cold, he causes the patient to breathe through an India-rubber tube, one end of which is inserted through a hole in the window sash, while the other end, fitted with a proper face-piece, is given to the patient. In treating a few cases that might occur in the summer, the air should be drawn through a refrigerator. The history of eight cases is given, all of which recovered rapidly.

15. *Schuster on Mercuric Soap.*—Dr. Schuster, of Aix-la-Chapelle, records some interesting investigations, made under his direction, into the therapeutic value of Mercuric soap, as compared with the older and less elegant forms of inunction of mercurials hitherto employed. Experiments made by Vajda and Paschkis in Vienna having tended to show that mercury could be detected in the urine (by Ludwig's method), in a large majority of cases treated by simple inunction, Dr. Schuster determined to examine the urine for mercury in cases treated, first with the soap and afterwards with the ointment, for purposes of comparison. The chemical processes were undertaken by Dr. Schridde, employing the Fürbringer-Ludwig method, with the additions described by himself in *Berlin Klin. Woch.*, No. 34, 1881. Four cases of well-marked syphilis were thus treated. In only two cases was mercury detected in the urine, as well after the use of the soap as after that of the ointment. All the cases showed improvement, but in none of them was the improvement more marked in the one case than the other. The therapeutic evidence, then, would tend to show that the preparations are of equal value, whilst the chemical evidence is negative. Further experiments, recorded elsewhere, prove that the appearance of mercury in the urine is a less common occurrence than has been supposed. The mercuric soap, which is now sold in twenty-gramme cakes, each containing four grammes of pure quicksilver, forms a good lather with ordinary water, and, being allowed to dry on the skin, leaves behind a thin grey layer of mercury, which, again, can be removed in a moment by washing, if required. It may thus be applied for longer or shorter time to various surfaces of the body; and although, like the other preparations, it is liable to produce a diffuse erythema if long continued in one spot, it will recommend itself for use in travelling, and also possibly as a means of administering mercury in cases where unreasoning prejudice forbids its use in any other way.

E. CLIFFORD BEALE.

16. *Cantani on Sulphuretted Hydrogen in Tuberculosis.*—In the *Centralbl. für die Medicin. Wissen.*, No. 16, 1882, Professor Arnaldo Cantani of Naples communicates the results of some experiments which he has undertaken in consequence of the publication of Froschauer's results obtained on animals, the subjects of septicæma, by the use of sulphuretted hydrogen. Both himself and his colleagues, Drs. Lepido-Chioti and Paolucci, had observed the good effects following the use of the waters of the solfatara of Pozzuoli, which, in addition to sulphuretted hydrogen, contains some sulphuric acid; and they were then induced to try the fluid in some amount of concentration, as well as subjecting patients to the action of the vapour in peculiarly constructed chambers. The results arrived at were these. 1. The patients, though at first unwilling, subsequently became quite tolerant of confinement in a room impregnated with sulphuretted hydrogen—no bad effects following. 2. That the patients hitherto treated in this manner usually became quite free from fever in a few days. 3. The local process did not make any progress

during the treatment, and the expectoration was lessened. The experiments are being continued to insure against accident. F. WILLIAM ELSNER.

17. *Robin on Cantharidism.*—A young child, who had an issue which was dressed with ointment of cantharides, was seized very suddenly with very acute pain whilst urinating (*Jour. des Sciences Méd. de Lille*, April 1882). These pains recurred in irregular crises of more or less duration, frequently with extreme intensity. Five attacks of the same kind occurred during three months. Finally, he was taken one day with an attack, which lasted seventeen hours, and was characterised by constipation, nausea, nightmare, and excessively violent pains. Several medical practitioners, called in consultation with M. Guéneau de Mussy, differed with regard to the diagnosis. Neuralgia of the bladder, amyloid degeneration of the kidneys, and compression of the medullary substance of the organ, were each suggested. M. Albert Robin examined the urine. On the day of this attack there were four discharges of urine, which presented a very notable difference in regard to their composition. The examination especially revealed four leading points—diminution of the chlorides, increase of the phosphates, a considerable quantity of lime and magnesia, and, finally, temporary albuminuria. This examination, therefore, did not reveal anything special, and the diagnosis still remained uncertain, when it was remembered that cantharides ointment had been used in dressing the child's issue. The dressing was immediately dispensed with, and the symptoms disappeared. The case was, therefore, one of a special variety of cantharidism, differing from ordinary cantharidism by several characteristics. Whilst in the latter there is a considerable diminution of urine, in the case in question this diminution was insignificant. The quantity of urea had also increased; but the most remarkable symptoms of this kind of cantharidism was the transient albuminuria, manifesting itself especially at the commencement of the attack, and disappearing with it.

MEDICINE.

1. BLAISE.—On Myxœdema. (*Archives de Neurol.*)

2. SCHMITZ.—Experience derived from Six Hundred Cases of Diabetes. (*Deutsche Med. Woch.*, Nos. 48, 49, 51, 1881.)

3. HELMKAMPFF.—On Vaccination. (*Deutsche Med. Woch.*, 1882, No. 11.)

4. HERTZ.—On the Treatment of Empyema in Phthisical Individuals by Continuous Aspiration. (*Deutsche Med. Woch.*, 1882, No. 11.)

5. ROSENBACH.—On Neuroses Associated with the Vagus Nerve. (*Deutsche Med. Woch.*, 1882, No. 12.)

6. BOURCY.—Rheumatismal Nodules. (*Jour. de Méd. Paris*, March 11.)

7. RAYMOND.—On Delirium Occurring in the Course of Chronic Nephritis. (*Archiv. Gén. de Méd.*, March 1882)

8. LITHGOW.—Recovery from Cirrhosis of Liver after Paracentesis Abdominis Twelve Times. (*Lancet*, May 1882, p. 730.)

1. *Blaise on Myxœdema.*—Dr. Blaise of Montpellier gives an interesting review of this disease in the *Archives de Neurologie*, Nos. 7 and 8. It is unnecessary to recapitulate the symptoms of *cachexie pachydermique*, as given by M. Blaise; but it will not be without profit to mention briefly a case of this disease, in which there were marked cerebral symptoms of a transitory nature. The patient was a woman, aged 34, of so-called scrofulous habit. The catamenia, which first appeared when she was eleven years old, were regular, but very profuse. There was a suspicion, almost a certainty, of venereal excesses, but there was no trace of syphilis. She had never had children. Ever since menstruation, the patient presented precocious development, so much so that at the age of thirteen she had the aspect of a woman of eighteen. The swollen appearance of the body was not manifest until her twenty-seventh or twenty-eighth year, although M. Blaise thinks that the affection began six years previously. At this time the hair on the scalp, eyelids, and other parts began to come away in large quantities, gastralgia with vomiting troubled her, and dysmenorrhœa made its appearance. The catamenia about the same time stopped for four months. Under generous diet, iron and quinine, her general condition was much relieved, although the unusual size of the body still persisted. At the age of twenty-seven her dimensions became more exaggerated, the skin became thickened, and various cutaneous sensory disorders supervened. There were frequent headaches and pains, especially referrible to the cheek-bones. At the same time the speech was slow and thick, the disposition restless, and the ideas retarded. Various delusions were noticed. She complained of bad tastes and smells, of obscene remarks addressed to her by people round about, of insults, etc. Although at first she knew that such ideas were imaginary, she soon became convinced that they were real. Shortly after this mental state became marked, the face took on the characteristic aspect, the skin and mucous membranes became thickened, and the speech more peculiar. But, curiously enough, the psychical condition and the swelling of the integuments rapidly diminished, and the obstinate constipation which previously existed gave place to attacks of diarrhœa. At the present time there is no sensorial disorder, and the mental state is excellent. The speech still preserves its former character, though to a very slight degree, and there still remains some slight bodily and mental inertia. The special facies, although less marked, has not disappeared, and the expression is mask-like. The teeth are in excellent preservation. There is still, however, general solid œdema of the body, and the skin is very dry. The urine, with the exception of a trace of mucus, is normal; but the quantity of urea contained in it is diminished (14 grammes only being excreted in one day). The temperature is not lowered. As regards treatment, iodide of potassium was tried, but ineffectually. Iron and quinine were apparently efficacious in bringing about the improvement in the patient's condition. M. Blaise thinks that this case goes to support Dr. Ord's theory that the nervous disorders are related to the state of the integument. The cerebral and bodily condition underwent simultaneous improvement.

W. B. HADDEN, M.D.

2. *Schmitz on Diabetes.* — Dr. Schmitz of Neuenahr (*Deutsche Med. Woch.*, 1881, Nos. 48, 49, 51; *Wiener Med. Woch.*, 1882, No. 11) has tabulated the results of his experience in 600 cases of diabetes, and has found that 407 of the patients were males and 193 females. The largest number, 196, occurred in the decade between 50 and 60; the youngest patient was a girl aged 4, the eldest, a man aged 78. The occurrence

of diabetes is undoubtedly influenced by an hereditary predisposition, which is found in families in which there are, or have been, psychoses of any kind. Tubercular families are also predisposed to diabetes. In 183 cases, there were nervous disturbances as direct exciting causes; in 153, the cause was the too liberal use of sugar and food containing it; in 45 cases, gout and general debility, after severe acute or chronic affections. The specific gravity of the urine varied between 1025-1035. Occasionally, from 1 to 1.5 per cent. of sugar was found to be present in urine of specific gravity 1015-1013. The prognosis as regards life, even to complete recovery, is by far not so hopeless as formerly considered. Dr. Schmitz enumerates a series of cases in which the patients remained for years without a trace of sugar in their urine, whilst living on a regulated diet, which was not even antidiabetic, in some cases only cane-sugar being strictly avoided. Some cases of long-standing diabetes may even be recovered by a correct treatment; and the author relates cases which were completely cured, and did not relapse, even after years of return to highly saccharine food. The prognosis rests upon the following factors; 1. Whether the illness were diagnosed early and were correctly treated, or whether it had already existed some time; 2. The exact carrying out of the directions by the patient; 3. The etiological character of the affection; 4. The age of the patient; 5. The amount of saccharine matter which can be borne with impunity. In recent cases the prognosis is favourable; diabetes, as a result of diseases of the central nervous system, or of severe chronic diseases, has a most unfavourable one. Gouty diabetes, and that following mental depression and the liberal use of saccharine food is the most favourable for treatment. Up to the seventh year, the prognosis is not bad, but becomes so from the tenth to the thirtieth, and is less favourable as age advances. Those cases are decidedly unfavourable in which the exclusive use of a fish and meat diet has not succeeded in causing the disappearance of the sugar from the urine; but those in which the diet, consisting of eggs, the leafy parts of vegetables, and a little mild cheese, keeps the sugar out, only to reappear on the administration of cane-sugar, starch, or fruit, or roots, enjoy a most favourable prognosis, and are least liable to relapses. F. W. ELSNER.

3. *Helmkampff on Vaccination.* — After remarking (*Deutsche Med. Woch.*, 1882, No. 11) on the antivaccination crusade which is carried on in Dresden, as well as in England, Dr. Helmkampff mentions certain striking instances of immunity on the part of bodies of German troops exposed in the most intimate manner possible to small-pox infection during the campaign of 1870. He then goes on to describe what he considers the best, because the 'quickest, safest, and also most pleasant' method of operating. It is by means of Güntze's vaccination pen. This consists of a blunt silver drawing pen, with a small, bent, only moderately sharp blade between the two points of the pen. The little blade is moved by means of a screw, and the pen having been filled with lymph, it is screwed into position. The instrument is then drawn gently, at an angle of 45 deg., twice across the insertion of the deltoid of both arms, the lines being two inches long, and about one inch apart. In this way, he gets generally as many as sixteen pustules. The children, he considers, are less annoyed by this method, while the method is certain.

4. *Hertz on the Treatment of Empyema in Phthisical Individuals by Continuous Aspiration.*— After noting and confirming the bad results of incision in cases of phthisical empyema, as given by Frœntzel, Senator, and others, Dr. Hertz states (*Deutsche Med. Woch.*, 1882, No. 11) that the contra-indication of this operation lies mainly in the fact that a pneumothorax is produced. The phthisical lung has but little power of recovery from the collapse, and, consequently, the tubercular affection makes rapid advance. Dr. Hertz, however, considers that in many cases removal of the exudation is most beneficial, and recommends for this purpose Dr. Bülau's method of thoracentesis, followed by continuous aspiration. The continuous aspiration is accomplished by passing through the trocar used for the thoracentesis a Nélaton's catheter, having attached to the end of it a long tube dipping under a disinfecting fluid. The catheter is kept in the pleura by means of a cotton-wool compress, fastened air-tight with collodion. Dr. Hertz brought before the Hamburg Medical Society two cases in which this treatment had been carried out with good results, that is, the purulent exudation was completely removed, and there was, within a month or six weeks after the operations, no advance, but, if anything, in one case, a regression of the general phthisical symptoms. The first patient was a girl, aged 16 years, the subject of hereditary phthisis; the second was a woman, aged 32, with phthisical affection of the right apex.

5. *Rosenbach on Neuroses associated with the Vagus Nerve.*—After noting the frequency of cardiac irregularity from indigestion, Dr. Rosenbach records (*Deutsche Med. Woch.*, 1882, No. 12) a case of cardiac irregularity caused by the horizontal posture, and a case of temporary central paralysis of the vagus nerve. The patient in the first case was a prematurely old man, aged 55, who complained that, so soon as he lay down in bed, he had a feeling of præcordial anxiety, and usually awoke in great distress, with the hands cold and stiff. With the exception of slight anæmia, some signs of arterial sclerosis, and a slight emphysema, there was nothing abnormal in his condition. The digestive functions were normal. His pulse in the erect posture was 72, regular, and moderately full; but, on his assuming the recumbent posture, with the head low, it fell to 60 or 64, and became irregular and intermittent, all which characters disappeared almost immediately on his assuming the erect posture again. Dr. Rosenbach, considering that he had excluded all other possible causes, attributes this phenomenon to the change in the outflow of blood from the cranial cavity. This outflow being much less free in the horizontal than in the erect posture, as shown by the more rapid current in the veins at the root of the neck when the erect posture is assumed, he considers that in a patient with arterial sclerosis the tonus of the vagus and of the vaso-motor nerves produced by the venous blood will cause retardation of the heart's beat, with increased arterial tension. The patient in the second case was a man, aged 31, affected with phthisis. While in hospital, he was attacked with vertigo and headache, his pupils being extremely narrow. Two days later he became insensible, breathing once, or at most, twice a minute, while at the same time the heart was extremely frequent and tolerably full. Under artificial respiration, carried on for an hour and a half, the patient recovered. Each time the artificial respiration was stopped, the patient again ceased to breathe, and became cyanotic. That the vagus could still con-

duct impulses, was shown by the fact that electric stimulation with a strong current reduced the heart's beats from 156 to 100 or less, per minute. After the above period, Cheyne-Stokes's respiration set in, and for two hours longer the patient required to be roused occasionally. A month later, the patient died of tubercular meningitis. Dr. Rosenbach puts down the symptoms in this case to a central paralysis of the vagus, owing to a disturbance of nutrition in the respiratory centre of the medulla oblongata.

JAMES ANDERSON, M.D.

6. *Bourcy on Rheumatismal Nodes.*—In April 1881, MM. Trosier and Bourcy published in the *Revue de Méd.* a paper entitled *Ephemeral Nodes in Rheumatism*, in which they cited many cases. A case of this complication is described by M. Bourcy in the *Jour. de Méd. de Paris*, 11th March. H., aged 19, had previously good health and no trace of rheumatism. He had whooping cough when he was seven years old, and never had gonorrhœa nor syphilis. In January 1881, he was attacked by scarlatina, when he was in full desquamation, and without any appreciable cause he was attacked by acute articular rheumatism, limited in the first place to the tibio-tarsal joints, but in less than three days extending to all the joints. There was moderate pain, with swelling, which soon yielded to the administration of a drachm and a half of salicylate of soda. Five days after the commencement of the symptoms of rheumatism, an intense endopericarditis supervened, which yielded to cupping and repeated blistering. Convalescence was tedious, but cure was completed towards the end of May. On the 13th September, the patient re-entered the hospital with a fresh attack of rheumatism. All the large joints were swollen and painful; there were intense fever, dyspnœa, a rubbing sound at the level of the breast, and an intense *souffle* with the first sound of the heart. Patches of erythema were present on the arms and thighs. He was treated with a drachm of salicylate of soda. On the 1st October, when quite convalescent, he detected some small nodules on the scalp whilst combing his hair. They were about the size of a lentil, and painless. They were movable on the bone and under the skin. In about eight days, some appeared on the eyelid and right elbow-joint; in the course of the tendons of the long and short palmar muscles, on which they were grouped like necklaces of beads; along the articular ligaments of the phalanges, where they simulated the gouty deposits, and where they acquired their maximum of development (about the size of a hazel-nut); also on the tendon of the right peroneus longus, on the spinous processes of most of the vertebræ, etc. Some of them, including those on the forehead, disappeared at the end of a few days; those on the scalp and on the tendons of the head gradually decreased; but up to the 15th December they had not completely disappeared. The last of them, those on the knee, and even on the peroneus and the spine, were as protuberant as ever. In other respects, the patient was completely cured of his attack of rheumatism.

7. *Raymond on Delirium during Chronic Nephritis.*—Dr. Raymond (*Arch. Gén. de Méd.*, March) has had the opportunity of observing during the evolution of chronic nephritis certain cerebral phenomena which do not usually attend cerebral uræmia, viz., symptoms of mania, of chronic delirium, with hallucinations of sight and hearing. The delirious form is very rare as an isolated manifestation of uræmia. Sometimes the delirium assumes the comatose type, and sometimes the convulsive type, but, as a general rule, it is moderate, quiet, mild, and transitory, and occurs usually towards the end. It may also, as M. Lasègue has shown, concentrate in itself the whole of the symptoms affecting the nervous system. It then shows the characteristics of acute mania. But, according to the same writer, the delirium must not be hastily attributed to uræmic poisoning in all cases in which it appears, for it may be caused by alcoholism, acute intercurrent affections, etc. Hagen of Erlangen has published four cases of this nature. In the *Jour. of Mental Science*, Dr. Samuel Wilks in 1874 related three cases of uræmic mania. Schultz, in 1876 (*Berl. Klin. Woch.*), has published one case, and Husland an analogous case in 1880. Finally, M. Lecorché relates another in his *Etudes Médicales faites à la Maison de Santé.* Dr. Raymond relates four cases in which the delirium could not, he says, be confounded with a simple mental excitement without perversion properly so called. But in that kind it is much more difficult to say if this delirium be produced in an accidental manner by the presence of any disease whatsoever, or of any complication, or whether it rather belongs to mental insanity. Examination of these four cases leads him by a process of exclusion to connect the intellectual disturbance with chronic renal disease, and more certainly still with uræmic poisoning; and M. Raymond points out, in support of this opinion, the well-verified alternation of delirium with other symptoms of uræmia.

8. *Lithgow on a Case of Recovery from Cirrhosis of the Liver in which Paracentesis Abdominis was performed Twelve Times.*—This case, reported in the *Lancet*, May 1882, p. 730, by Dr. R. A. D. Lithgow, occurred in an intemperate man, who was induced to leave off his stimulants, and who eventually returned to his duties almost quite well. After three years and a half he relapsed into his intemperate habits, and the disease became again developed.

RICHARD NEALE, M.D.

SURGERY.

RECENT PAPERS.

1. SCHMIDT.—Laparotomy in Purulent Peritonitis. (*Wratsch*, Nos. 51, 52, 1881.)

2. BERNHARDT.—Two Cases of Local Asphyxia of the Extremities. (*Arch. für Psych.*, Band xii.)

3. FIBER. — Nerve-Stretching in Tabes Dorsalis. (*Allgem Wien. Med. Zeitung*, No. 50, 1881.)

4. SCHÜLLER.—Transplantation of Undescended Testicle into the Scrotum. (*Centralbt. für Chir.*, No. 52, 1881.)

5. HEGAR and KASPRZIK.—Extirpation of Organs and Tumours of the Abdomen by the Elastic Ligature. (*Berlin. Klin. Woch.*, No. 12, 1882.)

6. WHIPHAM.—Complete Dislocation of the Sixth from the Seventh Cervical Vertebra, without Fracture. (*Lancet*, April 1882, p. 523.)

7. BENHAM.—Treatment of Hæmorrhoids by Brushing. (*Lancet*, April 1882, p. 602.)

8. BARWELL —Boro-Glyceride in Operative Surgery. (*Lancet*, May 1882, p. 774.)

9. MARSHALL.—On Colectomy. (*Lancet*, May 1882, pp. 721, 771.)

10 RUBIO —The Treatment of Anthrax by Subcutaneous Injections of Carbolic Acid. (*El Siglo Medico*, March 5. 1882.)

11. OBALINSKI.—On Ligature of the Common Carotid Artery in Obstinate Facial Neuralgia. (*Przeg. Lekarski*, No. 45, 1881.)

12. ZINOVIEFF, T. B.—Tracheotomy as a Remedy in Affections of the Larynx. (*Mediz. Obozr.*, Jan., pp. 74-80).

13. BUCHANAN. — Nerve-Stretching in Locomotor Ataxy. (*Glasgow Med. Jour.*, April 1882.)

14. MORRIS.—Anæsthetics in Bright's Disease. (*Amer. Ophthal. Soc. Trans.*, 1881.)

15 SAMIER —Treatment of Warts on the Foot and Hand. (*Bull Génér. de Thérap.*, March 31.)

16. WOLFF.—Wound of the Liver: Recovery. (*Atlanta Med. Reg.*, March 1882.)

17. HAYES.—Excision of the Knee. (*Dublin Jour. of Med. Science*, Feb. 1882.)

18. POINSOT.—The Treatment by Operation of Fracture of the Patella. (*Rev. de Chir.*, No. 1, 1882)

19. ASSAKY.—The Treatment of Chronic Abscesses by Injections of Alcohol. (*Gaz. Méd. de Paris*, Nos. 6 and 7, 1882)

20. KOCHER.—On Iodoform. (*Centralbl. für Chirurg.*, Nos. 14 and 15, 1882.)

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1. *Schmidt on Laparotomy in Purulent Peritonitis.*—The patient, a young man, aged 21, operated on successfully by Dr. Schmidt for purulent peritonitis was shown last year in the Medical Society of the Moscow Military Hospital (*Wratsch.*, Nos. 51, 52). Eight months before, he had been admitted into the hospital for recurrent fever. In the hospital he had three attacks, the last being followed by inflammatory fever, the cause of which was not clear. Six months thereafter the patient came into Dr. Schmidt's hands in a very reduced condition, and with a well-marked exsudative peritonitis. He decided to open the abdominal cavity, and, under antiseptic precautions, with the patient under chloroform, he made an incision from the umbilicus to the symphysis. On division of the thickened peritoneum, a large quantity of healthy pus gushed out. As there was no sign of decomposition, the cavity was emptied as completely as possible without washing it out with any antiseptic. Two finger-thick drainage tubes were inserted, the wound sewn up, and a strict Listerian dressing applied. The dressing was at first changed daily, afterwards every five to ten days. The wound healed without a bad symptom, and, in two months from the operation, the patient was recovered. Dr. Schmidt believes that the cause of purulent peritonitis is the escape of low organisms from the intestine into the abdominal cavity. Such may be the case, but certainly in this instance the explanation by a thrombosis, brought about by the recurrent fever, seems to lie nearer to hand. But however that may be, the case is an interesting and encouraging one, indicating that surgical treatment is justifiable in purulent peritonitis, as it is in empyema.

2. *Bernhardt on Two Cases of Local Asphyxia of the Extremities.*—The first case, a woman, aged 25 (*Arch. für Psych.*, Band xii), had suffered for two years with deadness of the hands and feet, the fingers becoming a dark, livid red on going into the open air. The skin was delicate, not sclerotic, with here and there superficial excoriations; paræsthesia in the hands, and stiffening of the deeper muscles on exposure to cold. The other case, a man, aged 27, was even more marked, but the symptoms were confined to the right arm, on which he had fallen two weeks before the symptoms commenced. The right hand was cyanotic and icy-cold, the cold being objectively perceptible as far as the elbow. The flexor muscles of the forearm were very sensitive to pressure, and reacted slowly to the induction current. The radial artery was hard, and showed no pulse. These cases, the author believes with Raynaud, depend on increased irritability of the vaso-motor centre in the medulla oblongata, kept up by peripheral stimuli. The use of the constant current applied to the cervical region of the cord, and to the nerves of the arm, produced temporary improvement in the woman, permanent in the man.

3. *Fieber on Nerve-Stretching in Tabes Dorsalis.*—Several cases have lately been recorded which show that stretching of the sciatic nerve, in cases of tabes, must be done with some caution. It seems unlikely, moreover, that the full benefit of the stretching can in so chronic a complaint be obtained by one stretching of the nerve. As, however, it would be impossible to cut down repeatedly on the nerve in order to stretch it, Dr. Fieber recommends (*Allg. Wien. Med. Zeitung*, 1881, No. 50) a proceeding which Vogt years ago recommended for sciatica. With the ankle superflexed, the knee superextended, the lower limb is superflexed at the hip-joint. Dr. Fieber has convinced himself on the dead body that an extension of the nerve can in this way be obtained greater than is considered necessary for processes of cure, and also that the traction extends by this method as far as the spinal cord. Even by one such extension he has obtained remarkable results. In the case of a young man with fully developed tabes, accompanied by optic atrophy, a single bloodless stretching of the sciatic nerve improved the patient so much, that he has sought a situation as assistant to a dancing master. J. ANDERSON, M.D.

4. *Schüller on Transplantation of Undescended Testicle into the Scrotum.* — Schüller (*Centralb. für Chir.*, No. 52, 1881) adopts the following mode of operating. An incision, similar to one for hernia, is made from the inguinal ring to the bottom of the scrotum, the canal is then opened, the testicle hooked out with the forefinger and fixed at the end of the scrotum by catgut ligatures, which pass through the external coverings of the testis and the scrotal walls. The tunica vaginalis, which is usually open, is then closed, as are also the inguinal canal and the skin, with the exception of a hole for a drainage-tube. The reasons for this operation are that the testicle, in its undescended state, is liable to strangulation in the inguinal canal, and so to cause pain and inflammatory affections; that herniæ usually complicate the defect, and are thereby made more perilous; and the increased liability to malignant growths (Cohnheim) which the partly undeveloped testicle undergoes in its abnormal situation.

5. *Hegar and Kasprzik on Extirpation of Organs and Tumours of the Abdomen by Means of the Elastic Ligature.*—An important communication on a new method of operating has been just made by the gynæcological clinic of Professor Hegar in Freiburg. It would seem that a means has been found by which total extirpation of organs of the abdomen, *e.g.*, the spleen, kidneys, perhaps even of the liver, can be undertaken without very much danger. Hegar was led to use the elastic ligature in the treatment of intraperitoneal fibroid pedicles by the very favourable results he previously achieved in thus treating extraperitoneal fibroids, the danger of hæmorrhage from the pedicle being by this means entirely excluded. Kasprzik, his assistant, in a communication to the *Berl. Klin. Woch.*, No. 12, 1882, has published the results of experiments upon animals, which consisted in placing pieces of elastic tubing, previously disinfected, in the peritoneal cavity of a rabbit, and killing the animal five weeks later, when it was found that the elastic had become fastened to coils of small intestine by fibrous tissue, but not a trace of suppuration was visible. Repeti-

tion of this experiment on other animals gave the same result; therefore, it was held that the elastic ligature was very well borne by the abdominal cavity as a foreign body. A second series of experiments consisted in the tying of pieces of omentum, uterus, spleen, liver, and kidneys, partly with elastic tubing, partly with solid India-rubber ligatures, the stumps being either cut off or burnt with the thermic cautery. The results were most satisfactory in the case of the omentum and uterus, especially with the thin India-rubber ligature, which did not cut its way through the tougher tissues as it did in the case of the spleen, where much better results were obtained by the tubing. In a dog, half the spleen was extirpated, and an elastic tube put on the pedicle, which was then cauterised. Five weeks afterwards, on opening the abdomen, a coil of small intestine was found closely adherent around the stump. On removing this, the ligature was found lying in a little cavity, above adhesions to the stomach. Another dog was at the time of the report still running about with one half of his spleen tied with the tubing, the other with the solid ligature, and was to be killed later on, in order to observe the condition after a longer period of incarceration. The liver and kidneys have not been successfully treated as yet; but Hegar is of opinion that more caution in the degree of tying and in the selection of proper tubing will later lead to success. From these experiments, it is evident that uterine pedicles can be treated without danger by the elastic ligature, which has here to deal with a firm tissue, which can be securely tied without leading to cutting through of the constricted portion, even the ligaments being capable of being treated in this manner. Kaltenbach, at the advice of Hegar, sank the pedicle of a fibroid, secured with an elastic ligature, into the peritoneal cavity after all the most carefully applied sutures had failed to control the hæmorrhage; and the patient, twelve days after operation, was progressing favourably, the temperature in the vagina being 38.4 Cent. (101.1 Fahr.) Hegar uses a particular instrument for the purpose of easily controlling the amount of constriction, which is a forceps with smooth blades and rounded edges, having a spring catch to fix its jaws. For temporary ligature, this fixation would be sufficient; for permanent, it is necessary to fasten the two ends behind the forceps with a wire or silk thread, then to remove it and cut the ends short, the rubber piling itself in front of the constricting wire, and thus precluding the possibility of slipping.

F. WILLIAM ELSNER.

6. *Whipham on Complete Dislocation of the Sixth from the Seventh Cervical Vertebra, without Fracture.*—Dr. Whipham reports, in the *Lancet*, April 1882, p. 523, a singular case of this rare accident. A woman, aged 46 years, fell downstairs while drunk, on Dec. 24th, and was not attended to, further than being carried to her bed by her drunken companions, until December 26th, when she was admitted into the hospital and found to be paraplegic. She was sufficiently conscious to complain of pain in the back of the neck. On the 27th, she complained of no pain, and was perfectly conscious. Sensation was abolished over the abdomen, but she had feeling in the arms, neck, and head, also indistinct sensation over the upper part of the thorax. There was no facial paralysis, and the control of the sphincters was lost. The patient gradually sank, thirty hours after admission. On *post mortem* examination, the ligaments connecting the sixth and seventh cervical vertebræ, as well as the muscles in the neighbourhood, were all completely torn through; the result being that there was complete dislocation of the one vertebra from the other. The intervertebral cartilage was much crushed, and remained attached to the upper part of the two vertebræ only. There was no fracture of the bones.

7. *Benham on the Treatment of Hæmorrhoids by Crushing.*—In the *Lancet*, April 1882, p. 602, Mr. R. F. Benham confirms, by statistical reports, the value of this mode of treatment, which was noticed in the LONDON MEDICAL RECORD, Oct. 1880, p. 416.

8. *Barwell on Boro-Glyceride in Operative Surgery.*—Mr. Richard Barwell, in the *Lancet*, May 1882, p. 774, recommends the use of the boro-glyceride, suggested by Professor Barff, for the preservation of meat, as a substitute for the carbolic acid spray in operative surgery, considering it safer, both locally and constitutionally, than carbolic acid. A few folds of lint, soaked in the solution (1 in 20), are placed on the well-washed wound, after the insertion of the necessary sutures, and then covered with mackintosh. The healing process takes place in the most beautiful and perfect manner.

9. *Marshall on Colectomy.*—Mr. John Marshall, in a clinical lecture, reported in the *Lancet*, May 1882, pp. 721, 771, enters exhaustively into the merits and demerits of this operation, for tumours or strictures of the colon. In the operation, the diseased part is excised, together with a good margin of healthy bowel, the open bowel being then stitched to the abdominal wound. Mr. Marshall's patient was a woman, aged 49, from whom an epitheliomatous tumour, as large as a hen's egg, was removed. The patient died on the third day. Six other cases of a similar nature have been reported, four of which lived months, one fifteen hours, one nine days, and Mr. Marshall's three days. In spite of the unfortunate issue in this instance, Mr. Marshall will approach another case of the same kind very hopefully.

R. NEALE, M.D.

10. *Rubio on the Treatment of Anthrax by Subcutaneous Injections of Carbolic Acid.*—Dr. Lopez Rubio records (*El Siglo Medico*, March 5, 1882) a case of anthrax, in which treatment by subcutaneous injection of carbolic acid—a plan first suggested by Dr. Olavide—gave very remarkable results. The anthrax occurred in a man aged 30 years, and was situated in the interscapular region. It measured when first seen, approximately, 7 inches vertically, by 5 horizontally, the centre being occupied by a cone of dark coloured sloughing skin. The constitutional disturbance was considerable, the pulse being 110, accompanied with pyrexia and severe headache. A 5 per cent. solution of carbolic acid, in water and alcohol, was injected, with a Pravaz's syringe, into each of the four quadrants of the tumour. Next day, the anthrax had decreased about one half in its superficial dimensions, its angry complexion had departed, while nearly all constitutional disturbance had ceased. The same treatment was continued for two days longer, when the patient had so far improved as to be able to return to his usual avocations.

LITTON FORBES.

11. *Obalinski on Ligature of the Common Carotid Artery for Facial Neuralgia.*—Dr. Obalinski (*Przeglad Lekarski*, 1881, No. 45), testifying to the great value of neurotomy in obstinate cases of facial neuralgia of peripheric origin, records a case in which the presence of pain in the region of all three branches of the right fifth nerve and divergent strabismus of the right eye led him to recognise the central nature of the affection. At the necropsy, there was found

an aneurism of the right internal carotid, which compressed the trigeminus. Having regard to the not very rare occurrence of intracranial aneurisms (Brinton, Crisp, Zehender), and to the difficulty of diagnosis between them and neoplasms, the author recommends, in all cases of facial neuralgia of central origin, to tie the common carotid artery on the side of the affection (that is to say, Dr. Obalinski endorses the suggestion made once by Patruban). Following such course, the author hopes to be able, in some cases, at least, to considerably relieve, or even to cure, the sufferings of the patient. Should the operation prove inefficient, there would result no harm from it to the patient. [So thinks our author; it is hardly possible, however, to agree with him in regarding ligature of the common carotid as an innocent operation.—*Rep.*]

12. *Zinovieff on Tracheotomy as a Remedy in Affections of the Larynx.*—Dr. Zinovieff of Moscow (*Mediz. Obozr.*, Jan. 1882) reports seven cases of various acute and chronic laryngeal affections, in which he performed tracheotomy, not only for the vital indication, but as a remedy favouring the resolution of the inflammatory process, and so tending to re-establish the normal lumen of the larynx. A careful study of these cases enables the author to put forward the following propositions. 1. Tracheotomy, by temporarily removing the larynx from the category of respiratory organs, places it under the conditions of absolute physiological rest, in which the larynx is not further irritated either by the air-currents or by muscular movements (breathing and speaking). Probably, for this reason, the operation favours the more rapid absorption of œdema and infiltration, and so removes the inflammatory laryngeal stenosis. 2. The value of tracheotomy as a therapeutic remedy is more striking in acute cases, but it is not to be denied in chronic cases. 3. The absorption of inflammatory products takes place more rapidly in cases where no local irritants are used after the operation. 4. As it is well-known, the process of absorption takes place more rapidly in stronger subjects; hence, the operation is to be performed, not only in states of extreme dyspnœa and poisoning of the blood by carbonic anhydride, but in an earlier stage, when the system is still healthy, and as soon as laryngoscopic examination has detected the changes which are liable to produce closure of the rima glottidis and dyspnœa. 5. Surgically, tracheotomy is free from any serious danger. V. IDELSON, M.D.

13. *Buchanan on Nerve-Stretching in Locomotor Ataxy.*—Dr. George Buchanan (*Glasgow Med. Jour.*, April 1882) has stretched both sciatic nerves in a case of locomotor ataxy of five years' standing, for violent pains in the legs. The result was to produce considerable improvement in the gait, and complete disappearance of the lightning pains, with considerable amelioration of the patient's general condition. After the left sciatic nerve had been stretched, peculiar athetosis-like movements were noticed in the toes; and this symptom still continued, coming on each day, and lasting for about an hour.

14. *Norris on Anæsthetics in Bright's Disease.*—Dr. W. F. Norris (*American Ophthal. Soc. Trans.*, 1881) has drawn attention to two cases of death after operations for cataract. The patients were both anæsthetised with sulphuric ether; both entirely recovered consciousness, but died comatose, one a few hours, the other eighteen days after the operation, and in both a careful necropsy revealed no organic lesion, except Bright's disease of the kidneys. In his opinion, both deaths were due to congestion of the already diseased kidneys by the administration of ether. [The reporter has seen coma come on in more than one case after operation in which ether had been used, in which the only explanation appeared to be the contracted state of the kidneys.—*Rep.*] ROBERT SAUNDBY, M.D.

15. *Samier on the Treatment of Warts on the Sole of the Foot, and the Palm of the Hand.*—Dr. Samier, in his *Thèse de Paris*, 1880 (*Bull. Génér. de Thérap.*, March 30), remarks that warts have no inherent gravity; but from their situation may become troublesome to the patient, and even painful, so that it may be desirable to remove them. Warts under the nails often become the starting point of onychia, and are very painful. In pedunculated warts, constriction with a silk thread, or with horsehair, may be performed. When situated on the hands or on the face, or wherever the epidermis is too thick, and does not offer too much resistance, frequent cauterisation with acetic, nitric, or chromic acid may be sufficient. In the palm of the hand, or on the sole of the foot, abrasion must be resorted to, after which Vienna paste, or arsenical paste, may be applied. The tumour may also be removed by a bistoury, and cotton-wool dressing be afterwards applied.

16. *Wolff on a Wound of the Liver: Recovery.*—Dr. Wolff (*Atlanta Med. Register*, March 1882) reports a case of recovery from a knife-wound of the liver. The right lobe was injured, and protruded through the external wound. The hæmorrhage was at first considerable, but was controlled by cold. The blood, on examination, was found to contain sugar. The febrile reaction was not great. The stools were of a light colour. The patient became icteric three days after the receipt of the wound, and there was retention of the urine, which, when drawn off by the catheter, was found to be dark and turbid. The patient made a good recovery; quinine and morphia being given internally.

17. *Hayes on Excision of the Knee.*—Mr. Hayes, of the Mater Misericordiæ Hospital, gives, in the *Dublin Jour. of Med. Science*, No. 2, 1882, a table of fourteen cases of excision of the knee in chronic disease, treated by himself, and in which the limbs were put up in an apparatus which experience of other methods had led him to devise. Eleven patients recovered with excellent limbs. In three cases, secondary amputation was required: of these, one recovered, one soon died of phthisis, and the third died within a week after the performance of the second operation. The success of this operation, in the practice of Mr. Hayes, and also in that of his colleagues, is attributed in great part to his method of retaining the limb during the after-treatment. After the leg and thigh have been encased in rollers of soft flannel, a splint is applied, which consists of two concave pieces of perforated iron, one moulded so as to fit the posterior surface of the leg, and the other adapted to receive the posterior surface of the thigh. These pieces are connected posteriorly by means of a strong, flat, but narrow bar of iron, so bent as to form an oblique step, about three inches in length, and having the end to which the leg-piece is attached exactly one inch in advance of that fixed to the thigh-piece. This apparatus is provided with pads arranged for leg and thigh, the pad for the leg being made thicker below than above, and then it is to be carefully adjusted behind the limb. A soft pad is now to be laid in front of the thigh near to its lower end, and upon this pad a concave piece of iron, about four inches long, by from two and a half to

three inches wide, is to be placed. The thigh is then firmly secured in the upper part of the splint by uniting both splint and limb with a strong strap, which is to be tightly buckled across the upper pad of the anterior small splint, whilst, lower down, the strap of a Petit's tourniquet is to be fixed, the brass-work of the tourniquet resting on the anterior splint. One or two turns of the tourniquet will firmly press back the lower end of the femur, so as to render the anterior surface of this bone level with the anterior surface of the tibia. The foot is then encased in several turns of a gypsum bandage, which is to be carried upwards, encircling the leg and lower part of the splint as high as the point at which the flannel bandage terminates. Whilst this is being accomplished, the foot must be held at right angles to the leg, lest extension of the ankle should occur, and prove a source of trouble at a later period. A foot-piece is altogether unnecessary, as the gypsum bandage constitutes a firm boot. The wound having been covered by antiseptic dressing, the limb is to be swung. This apparatus, Mr. Hayes states, forms a light, portable, and still very secure means for fixing the limb. The shortness of the thigh-piece, combined with suspension of the leg, enables the patient to assume the sitting posture, and to change position without risk or discomfort.

18. *Poinsot on the Operative Treatment of Fracture of the Patella.*—M. Poinsot of Bordeaux, in a contribution to the *Revue de Chir.*, No. 1, 1882, on operative intervention in cases of simple transverse fracture of the patella with effusion, after allusion to the rare occurrence of osseous consolidation after this injury, discusses the value, firstly, of puncture for the removal of effusion; and, secondly, of coaptation of the fragments by sutures. Separation of the fragments, in cases of transverse fracture, is due not only to muscular contraction, but also to intra-articular effusion, which takes place slowly, and becomes most marked on the second or third day. Hence, as is asserted by many surgeons, the removal of this effused fluid by puncture becomes a positive indication; and less scruple should now be held in applying such treatment, as it may be rendered quite harmless by the adoption of the antiseptic method. The cases that have been reported by Schede, Volkmann, and Labbé prove that puncture of the knee, with antiseptic precautions, in cases of fracture of the patella, is not usually followed by any serious result, and facilitates a sufficiently exact coaptation with further treatment by splints. In six out of nine recorded cases, there was close osseous union, allowing active extension of the leg. M. Poinsot, who asserts that there can be no doubt as to the advantages of treatment by puncture, is of opinion that this operation should be practised in every case of moderate, as well as a considerable, effusion. It should be done without delay, as the effusion consists always of blood which may soon coagulate, especially in cases where there is free communication between the interior of the joint and the seat of fracture. Poinsot prefers a small puncture and aspiration to any other plan of emptying the joint. Schede, in his cases, used a large trocar, and, after removal of the effused fluid, injected a solution of carbolic acid. The objections to this practice, as has been pointed out by Kocher, are the risks of poisoning by carbolic acid, and of irritation being set up within the joint by this agent. In two cases of recent fracture of the patella, under the care of Mr. Macnamara, puncture and aspiration were combined with subcutaneous section of the extensor tendon. In one of these cases there was osseous union, and the two portions of bone had been so closely applied that it was impossible to make out the line of fracture. In every case in which the effused fluid is removed from the joint, the injured limb must subsequently be treated in the ordinary way by being extended, and fixed in a splint or a stiff bandage. M. Poinsot recommends that, for some months after consolidation of the fracture, the knee be supported by an apparatus limiting flexion of the leg. In his remarks on the treatment of fracture of the patella by opening the joint with antiseptic precautions, and bringing the fragments together by metallic sutures, M. Poinsot states that in every case in which this operation has been performed, the satisfactory results have been attained of adequate consolidation and of restoration of the functions of the knee. In seven of these cases at least, there seems to have been undoubted union by callus. In discussing the propriety of practising this as a general treatment of recent fracture of the patella, M. Poinsot expresses a doubt whether, since the ordinary treatment usually results in adequate consolidation, and puncture is likely to remove the principal obstacle to coaptation of the fragments, the surgeon be justified, in the majority of cases, in subjecting his patient to the risks of an operation which the least neglect of any detail of antiseptic practice would render extremely dangerous. Still a wide field is open to this operation, and it is allowed by M. Poinsot that it may be legitimately undertaken, firstly, in cases of recent fracture when puncture has failed to remove the intra-articular effusion; and, again, in old cases where there is considerable separation of the fragments, and the functions of the injured limb have been thus much impaired.

19. *Assaky on the Treatment of Chronic Abscesses by Injections of Alcohol.*—M. Assaky reports, in the *Gaz. Méd. de Paris*, Nos. 6 and 7, 1882, fourteen cases of chronic abscess treated after Professor Gosselin's method. This method consists in the injection of alcohol, and is based on the antiseptic properties of this agent, and its action on inflamed or suppurating tissues. An incision about a third of an inch in length is first made, and the abscess-cavity, after its contents have been discharged through this opening, is washed out with alcohol at 90 deg. The quantity of injected alcohol varies according to the dimensions of the abscess. It is necessary that the quantity be sufficient for application to the whole of the internal surface of the cavity. The seat of the emptied and injected abscess is then covered by a dressing of camphorated *eau-de-vie*. On the following day, there is an abundant secretion of dark-coloured and thick fluid. The secretion diminishes in quantity from day to day, and, as it diminishes, its density becomes lower, and its colour lighter. In the ultimate stage of the treatment, it presents a serous transparent fluid resembling lymph. When, on pressure, this serous fluid only can be forced out, and in small quantity, the abscess is on the point of becoming healed, there is no longer any cavity, the walls are adherent to each other, and there remains but the small incision, which closes in the course of two or three days. This method, M. Assaky states, has the following advantages: it necessitates only a small wound of the integument, and so there is less risk of the ordinary complications of wounds, and the cicatrix is small and is hardly apparent. The superiority of the method, however, consists chiefly in the considerable abridgment it effects in the duration of the treatment of chronic abscess. It is very evident, M. Assaky states, that the number of days

occupied in the healing of an abscess by this method must depend on the extent of the sac. But all other things being equal, the duration of treatment, in a case of abscess punctured and injected after Gosselin's method, is much less than that of one submitted to ordinary methods. In small abscesses, and those of medium size, cure may be effected between the second and seventh days. This treatment may be applied to any chronic abscess that is circumscribed, and consists of one regularly shaped cavity. In most cases, one injection only of alcohol is necessary; but when the abscess is very large, two or three may be required. The indication for a repetition of the injection would be a persistent purulent discharge. The injection of alcohol into the inflamed tissues, it is asserted, is not very painful. The pain varies with the sensitiveness of the patients. One will complain of lancinating pains, and of burning or pricking sensations which will last from ten minutes to an hour, whilst another will not complain of any painful sensation. Sometimes, though rarely, the injection of alcohol is followed by more or less extensive sloughing of the skin. This result has seemed to M. Assaky to have been usually associated with too long delay on the part of the patient in applying for treatment, so that the seat of the abscess has become much inflamed, and the skin hot, red, and very tense. Associated with this condition, there may be a further cause in some faulty diathetic condition of the patient.

20. *Kocher on Iodoform.*—Professor Kocher of Bern, in a paper on iodoform as a surgical dressing (*Centralbl. für Chirurg.*, Nos. 14 and 15, 1882), states that the recent extravagant praise of this agent as an antiseptic dressing, has already been followed by much disappointment. It is now generally admitted that, in the local treatment of wounds capable of healing by primary union, iodoform does not give better results than other antiseptic agents used for dressings. According to Mikulicz, in Billroth's practice, iodoform has been found less efficacious than Lister's dressing of antiseptic gauze. Iodoform is more useful as an application to deep and open wounds. The presence of an insoluble or but slightly soluble powder on the raw surface, prevents premature union of the more superficial parts of the wound; and, consequently, retention of discharge. Iodoform, though much weaker in its antiseptic action than carbolic acid and other antiseptic dressings, may still, it has been suggested, have some value as a dressing in consequence of its being but slightly soluble. In dressing a wound antiseptically, most surgeons would consider it desirable to use the weakest and least irritating agent, so long as this can act with thorough efficiency and for some time as an antiseptic. It has been proved that weak solutions of chloride of zinc and of salicylic acid are capable of rendering even extensive wounds antiseptic; but iodoform has the advantage of being an almost insoluble agent, and its antiseptic action, though relatively weak, can be maintained for a much longer period than that of stronger antiseptics in solution. Professor Kocher has found iodoform a dangerous dressing, and holds that, by reason of its toxic action, it ought at once to be removed from the list of surgical applications. He has observed no fewer than twenty-three cases, in which iodoform used in the treatment of recent wounds acted as a poison. The chief symptoms are excitement, restlessness, and mental depression. The patient sometimes becomes delirious, and has mental delusions. Attempts are occasionally made to get out of bed at night and to wander. One case is reported in which an old man, with an open wound that had been covered by iodoform, was killed by breaking through a window. These symptoms, Kocher has found, at once cease on changing the iodoform for some other dressing. The local application of iodoform to a large fresh wound may be followed by total loss of memory and impairment of speech. In another case, after extirpation of cancerous disease of the rectum, and application of iodoform to the raw surfaces, the patient became very noisy and violent, and had what resembled an attack of acute mania. Kocher has also observed, after dressing with iodoform, complete loss of consciousness. In this form of poisoning, there is usually great difficulty in getting the patient to take nourishment. The bladder has to be relieved by catheterism; the limbs, more particularly the arms, become stiff and contracted, and finally, in very severe cases, collapse may occur. Iodoform, it is stated, accelerates the pulse to a high degree. Notwithstanding this increased frequency of the pulse, and the mental excitement and restlessness observed in cases of iodoform poisoning, fever is seldom, if ever, observed as one of the symptoms. The patient, after a prolonged toxic action of iodoform, passes into a chronic condition of restlessness, and suffers much from loss of sleep and impairment of nutrition. The poisoning, as a rule, is much more severe when coming on rapidly after a surgical operation, than when it is due to the prolonged action of iodoform. Kocher believes that iodoform gauze is as dangerous as the pure powder. As might be expected of so weak an antiseptic, iodoform, when used externally, and as a surgical dressing, has no influence on the spreading of an epidemic of erysipelas. Iodoform differs from pure iodine in its poisonous effects, as it does not give rise to any exanthem or to nasal catarrh, or cause vertigo. It often acts as a poison when it has been applied in small quantities, and when the amount of iodine given off must be far too small to account for such toxic effects. Then, again, the symptoms of iodoform poisoning may persist long after the disappearance of iodine from the urine and other excretions. According to Schede, iodoform is a cumulative poison, and prompt removal of this powder from a raw surface will not ensure the patient against persistent and increased extent and severity of bad symptoms. Iodoform poisoning, Kocher states, presents a condition similar to that produced by chronic chloroform poisoning. In both conditions the pulse is very high, and the patient suffers from mental depression, and finally passes into a state of collapse. In severe and critical cases of iodoform poisoning, as in those of slow poisoning by chloroform, the most promising treatment is stated to consist in injection into the circulatory system of a solution of chloride of sodium. More than twelve fatal cases of iodoform poisoning have, it is stated, been reported during the past twelve months by a small circle of surgeons, and Kocher thinks that probably there have been from twenty-three to twenty-five such cases. It is held that iodoform ought at once to be officially rejected from our list of remedies. With such rejection there will not be any loss, since, as an insoluble antiseptic application, subnitrate of bismuth is quite as efficacious as iodoform, and at the same time costs less and is free from unpleasant odour.

W. JOHNSON SMITH.

OBSTETRICS AND GYNÆCOLOGY.

RECENT PAPERS.

1. FRANKEL.—On the Diagnosis and Operative Treatment of Extra-uterine Pregnancy. (*Breslauer Ærztl. Zeit.*, 1882, No. 7.)

2. HAIDLEN.—The Question of Total Extirpation of the Uterus. (*Archiv für Gynäkol.*, Band xix, Heft 1.)

3. LEOSCHIN, LÉON.—On the Use of Iodoform in Ovariotomy. (*Annal. de Gynécol.*, April 1882.)

4. MANN, J.—Decapitation with the Wire Écraseur.—(*Centralbl. für Gynäkol*, May 27, 1882.)

5 MARCHIONNESCHI.—On the Lochia. (*Annali di Ostetr. Ginecol. e Pediatria*, Nov. 1881 to Jan. 1882)

6. MORÈ.—Amenorrhœa giving rise to Fæcal Vomiting. (*Jour. de Méd. de Paris*, 20th May 1882)

7. OUSPENSKY.—Hysterical Deafness. (*Jour. de Méd. de Paris*, 20th May 1882)

8. STARK.—Case of Total Extirpation of Cancerous Uterus through the Vagina. Removal of a Portion of the Involved Ureter, with Subsequent Extirpation of the Corresponding Kidney. Recovery. (*Berl. Klin. Woch.*, 1882, No. 12)

9. WEIDLING, L.—The Prognosis of Labour in Contracted Pelvis. (*Inaug. Diss.*, Halle, 1882)

10. WEISSENBORG. — Intra-uterine Medication with Iodoform in Chronic Endometritis. (*Berl. Klin. Woch.*, 1882, No. 11.)

11. WHITWELL, W. S.—The Treatment of Abortion by Hot Water Injections. (*The West. Lancet*, April 1882.)

12. HUNTER.—Simultaneous Trachelorraphy and Perineography. (*New York Med. Jour. and Obstet. Rev.*, May.)

13. RODINSTEIN.—Prolonged Gestation. (*New York Med. Jour. and Obstet. Rev.*, May.)

14. BAKER.—Vaginal Ovariotomy. (*New York Med. Jour.*, March.)

15. CURRIER.—Removal of the Uterus in Ovariotomy. (*New York Med. Jour.*, March.)

16. BARTEE, E.—Menstruation and Metrorrhagia in Various Forms of Fever. (*Inaugural Dissertation*, St. Petersburg, 1881.)

17. BISCHOFF —Successful Transfusion of an Alkaline Solution. (*Correspond. für Schweizer Ærzte*, Dec. 1, 1881.)

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3. *Leoschin on the Use of Iodoform during Ovariotomy.*—Dr. Leoschin has employed iodoform in four cases of ovariotomy, but did not exactly measure the precise quantity introduced into the body in each case. In each case, the quantity of iodoform used was sufficient to cover with a thick layer of powder the whole of the cut surfaces of the pedicle and ligatures. The whole superficies of the abdominal wall, of the epiploon, and of the intestines at the points where adhesions had been broken down, was powdered with iodoform. Finally, every part of the peritoneum which had come into contact with the fingers or instruments was similarly dusted over with iodoform. Each ligature was covered with it, as well as the abdominal wound when sewn up. The dressing was completed with Lister's gauze, a large Neuber's cushion, and a large disinfected sponge to exercise pressure. Of these four cases of ovariotomy, three recovered without any complication, and without any febrile reaction. The wound in the abdomen healed under one dressing, which was replaced by a simple plaister bandage on the sixteenth, seventeenth, and twentieth days. When the dressing was removed, a strong odour of iodoform was perceptible, and a considerable quantity of the powder was found lying along the line of the abdominal wound. In one of these cases, the operation was very tedious. A suppurating cyst had contracted adhesions with the surrounding parts over its whole surface. It was necessary to divide a large number of the adhesions, and to ligature them. When the cyst was punctured with the trocar, it was impossible to prevent the escape of a large quantity of purulent matter into the abdominal cavity. The peritoneal cavity was carefully cleansed with phenicated sponges, and a large quantity of iodoform was used. In the fourth case of ovariotomy, the patient was attacked with perimetritis, for which she still required treatment thirty-two days after the operation. In the other surgical operations in which Dr. Leoschin used the iodoform, he only had two cases in which convalescence was at all retarded. After the removal of an enormous fatty tumour, and an amputation of the breast, secondary hæmorrhage set in underneath the skin. Is this to be attributed to the influence of the iodoform? Because, two days after the operation, some ecchymoses appeared at points at some distance from the wound. There was no alteration of the blood, no marked anæmia, nor other cause to explain it. The high price of iodoform is compensated for by the saving which results in the other dressings required. In the above cases, the wounds were simply powdered with iodoform, and covered with a simple dry dressing of unprepared gauze, which is cheap.

6. *Morè on Fæcal Vomiting caused by Amenorrhœa.*—The patient, aged 30, healthy constitution, without previous morbid symptoms, had suffered for three days with obstinate constipation, pain in the abdomen, and frequent vomiting. Then fæculent vomiting set in. At first, it was supposed there might be a strangulated hernia, or an abdominal tumour; but this idea was abandoned, on account of no other symptom beyond the fæcal vomiting being present. In presence of this remarkable case, Dr. Morè confined himself to giving opiates and a draught of soda bicarbonate, which the patient vomited almost as soon as she had taken. It was also found impossible to get the medicine absorbed in the form of pills. The fæcal matter was vomited in such quantities that at one time nearly two litres were brought up. She was ordered sulphate of soda, enemata of sweet almond oil, and frictions of belladonna over the abdomen. Next day the vomiting was as bad as ever, and the abdominal pains worse, if anything. Ice was then tried, but without success. The ice was, however, continued, and colocynth and aloes pills were given. The next day, the patient only vomited fæcal matter once during the day, and once during the night. At the same time, she pointed out to her physician that the menstrual flow was commencing, although only in small quantity. She added that the menstrual period was due the preceding week, but that it had been suppressed by a moral emotion. The onset of the vomiting thus coincided with the suppression of the menstrual flow. The menstrual flow was now encouraged, and, as it increased, the vomiting gradually disappeared. The stomach retained food and drink, and fifteen days after the first fæcal vomiting she was completely cured.

8. *Stark on Total Extirpation of the Uterus through the Vagina.*—The patient, aged 42, had the whole of the vaginal portion of the cervix eaten away with cancer. The growth had extended on the right side a distance of from 3 to 4 centimètres into the vagina. The uterus was movable. The patient complained of pains in the region of the right kidney. The operation of removing the uterus was tedious. Dr. Stark could not succeed in separating the right

ureter from the surrounding diseased tissue. Finally, the ureter was cut through. The vaginal wound was not sewn up. A thick drainage-tube was left in the wound. No unfavourable symptoms appeared until the third day, when severe pain in the right kidney set in. In the evening, urine was found flowing in the vagina. The patient was feverish. The wound, which had healed, was reopened, and washed out with carbolic solution. The temperature then fell. On the sixth day after the original operation, it was determined to remove the right kidney. This was carried out on the plan of Simon. The wound healed by first intention. By the fifteenth day, the abdominal wound was completely closed. At the end of three months, there was no return of the disease.

10. *Weissenborg on Iodoform in Chronic Endometritis.*—The author recommends the application of iodoform in chlorotic and scrofulous women, in whom tuberculosis might be suspected. He introduces the iodoform in five-gramme doses through an instrument resembling a hollow sound, with two side openings.

11. *Whitwell on the Treatment of Abortion by Hot Water Injections.*—Dr. Whitwell states that the advantages of injecting hot water into the uterus and vagina in the treatment of abortion are these. 1. The existing hæmorrhage is stopped almost instantly, and there is but little liability of return while the douche is continued. 2. There is seldom necessity for instrumental interference. 3. The patient, who may be in a state of partial collapse, is revived by the application of heat. 4. The keeping the vagina full of water allows the hand to operate with greater freedom. 5. There being no fear of hæmorrhage, the operator can work leisurely, and violence is unpardonable. 6. By carbolising the water, septicæmia is guarded against; and, lastly, nothing can be suggested which would be more likely to save the patient from pelvic inflammation, with its attendant evils. Dr. Whitwell's practice is as follows. Supposing the miscarriage inevitable, should the os be closed and the hæmorrhage not severe, and from the indications it appeared safe to temporise, he would tampon the vagina as thoroughly as possible with either styptic cotton or simple carbolised wads of absorbent cotton. The chances are that, when this was taken away, the os would be found to be dilated, and the ovum ready to be discharged into the vagina. If the os were closed, the membranes having ruptured, and it were necessary to take active measures at once, Dr. Whitwell would advise the use of an anæsthetic, feeling sure that dilatation would then be a matter of little difficulty. If, on the other hand, the os were open and the ovum presenting, he would inject the hot water into the vagina, and thus stimulate the contractions of the uterus. If this were not sufficient, either the nozzle of the syringe or an attached catheter could be passed within the cervix, and the hot water be slowly injected. Under this stimulus, the womb would quickly force the ovum into the vagina with but little manual assistance, and all hæmorrhage would cease. Should there, unfortunately, be any retention of a portion of the ovum or membranes, he would wait, and use the hot water again as soon as any oozing appeared. FANCOURT BARNES, M.D.

12. *Hunter on Simultaneous Tracheloraphy and Perineoraphy.*—In a contribution published in the *New York Med. Jour. and Obstet. Rev.* for May 1882, Dr. James B. Hunter, Surgeon to the Woman's Hospital, gives a number of cases of prolapsus uteri and of laceration of the cervix and perinæum, remarking that extraordinary cases are sure to be fully described, while those of every-day occurrence are often passed over as of little consequence. In the belief that the latter possess some interest and value to many readers, he purposes to present sketches of a few cases as they occur in his service. In regard to the performance of Emmet's operation for laceration of the cervix and the operation for lacerated perinæum, both at the same time, he states that several years ago he tried this method in a hospital patient, who could not remain long enough to have the operations done at the usual interval of two or three weeks. It succeeded so well that he has since done the double operation frequently, both in hospital and in private practice, and has never had occasion to regret it. If, however, the laceration of the cervix be very extensive, or any condition exist that renders hæmorrhage probable, he always does the operations separately. Sometimes, too, it is not desirable to keep the patient long under ether, in which case the operations should not be done at the same time. The disadvantages of the double operation are—that it is impossible to reach the cervix, if it should be necessary, without sacrificing the new perinæum; that the patient is longer under the influence of ether; and that the sutures cannot be removed from the cervix so soon. The advantages are—that the patient takes ether only once, and that she and her friends are spared the preparation (always somewhat formidable in a private family) for two operations; that there is an economy in time, as she lies in bed no longer than if the operation on the perinæum alone had been done; that a delicate patient suffers less fatigue, and is less emaciated, than she would be after having gone through two separate operations. He usually removes the sutures from the perinæum on the eighth day, and those from the cervix two weeks later, though with care the latter may be safely taken out earlier; while, on the other hand, there is no objection to letting them remain a month if it be convenient to do so, as they cause no irritation or inconvenience if the twisted ends of the wire be properly bent over and out of the way. While, therefore, he does not recommend the double operation as a rule, he considers it practicable in many cases, and often prefers to do it.

13. *Rodenstein on Prolonged Gestation.*—In the May number of the *New York Med. Jour. and Obstet. Rev.*, Dr. Louis A. Rodenstein reports four cases of prolonged gestation, and remarks that the number of cases cited upon undoubted authority by every writer on obstetrics, and the cases constantly reported as occurring under the personal observation of general practitioners, go to show that prolonged gestation is not a myth, and especially that it should not be explained away by questioning the virtue of the mother. How long the duration of the period of gestation can extend beyond the normal time is not yet determined, perhaps cannot be determined, but that it may extend over two months is apparently settled. The same principle is involved, whether the uterus tolerates the presence of the child three days or one hundred and forty-five days (Professor Meigs's *Report*) after the natural term of gestation has expired. He believes that, after the uterus has performed its physiological function of gestation for the natural term, it rests from the work of gestation proper. Why does it not, then, exercise the function of expulsion? That question he does not attempt to answer, but believes that, after

gestation has performed its proper and peculiar work, the growth of the child is complete, and it thereafter lies dormant in the womb. Otherwise, the child would grow to huge size, and its delivery in the natural way would be impossible; whereas, in the cases cited, the size of the child at the expiration of the period of prolonged gestation was normal.

14. *Baker on Vaginal Ovariotomy.*—In the March number of the *New York Med. Jour.*, Dr. W. H. Baker relates a case in which he removed a suppurating dermoid cyst of the ovary *per vaginam*, and remarks that the success which now attends ovariotomy by abdominal incision renders the cases very few in which removal by the vagina would be the better method. He would limit it, first, to cases where the cysts are small and their contents bland, so that removal can be effected without difficulty, and without great danger of septic peritonitis from the escape of any of the fluid into the peritoneal cavity; second, to dermoid cysts so small as to be removed through the vaginal incision without evacuation. In the case of an ovarian cyst firmly adherent in the pelvis, he believes the best operation to be that of drainage into the vagina, with subsequent destruction by suppuration or by the cautery.

15. *Currier on Removal of the Uterus in Ovariotomy.*—In the *New York Med. Jour.* for March 1882, Dr. Andrew F. Currier relates a case of removal of the uterus in connection with a multilocular ovarian cystoma, performed by Dr. T. Gaillard Thomas; and remarks that to remove a simple free ovarian cyst is not a difficult operation, but that such tumours are not to be looked for in the majority of cases. From the record of more than fifty laparotomies performed at the Woman's Hospital during twelve working months, he finds only nine done for ovarian tumours unattached to surrounding viscera. In several of these, other serious complications were present. The adhesions in the remaining cases were more or less firm, involving the necessary risks of hæmorrhage, septicæmia, and peritonitis. Three out of the entire number held such intimate organic relations to the uterus, as to call for the removal of that organ. In one other case, the uterus was removed on account of a growth developed from it. In others, the portion of sac attached to the uterus was left. The ovariotomist should be prepared to take the bold step of removing the uterus when it is called for by such complications.

16. *Bartel on Menstruation and Metrorrhagia in Typhus, Recurrent, and Enteric Fever.*— In order to throw some light on the influence of the typhus process on the menses, and hæmorrhage from the genitals in general, Dr. Bartel (*St. Petersb. Inaug. Diss.*, 1881) undertook observations upon 172 female patients (79 of them had petechial typhus, 50 enteric, and 43 recurrent), which led him to the following conclusions. 1. The influence of various typhus forms on the appearance of menstruation depends on the interval between the beginning of the disease and the regular menstrual date. 2. Should the menses be expected within first five days of the disease, they will surely appear as usual: if within from six to fourteen days, they will more probably appear than not. Should the menstrual date lie beyond a fortnight from the commencement of the disease, the appearance of the catamenia is not to be expected. 3. Generally, the menses are oftener suppressed in cases of enteric fever than in typhus or recurrent. 4. In 54.32 per cent. of all Bartel's cases, the menses appeared in due time; in 8.64 per cent. they came irregularly; in 37.03 per cent. they did not appear at all. 5. The influence of various typhus forms on the character of the menstrual discharge (when such appears) is not great. It is least in cases of enteric fever; typhus rather diminishes the quantity of discharge; recurrent fever rather increases it. 6. Second and third appearances of menses in typhus patients are very rare. There is nearly always amenorrhœa. 7. Pseudomenstruation, or non-menstrual sanguineous discharge from the genitals in the course of various typhus forms, appears rarely (only in 3.48 per cent. of all cases), and still more rarely is it profuse. It is comparatively oftener observed in exanthematic typhus. The author never saw pseudomenstruation in patients who had not yet begun or who had ceased to menstruate. V. IDELSON, M.D.

17. *Bischoff on Successful Transfusion of an Alkaline Solution.*—Dr. Bischoff reports (*Correspondenzbl. für Schweiz. Aertze.*, Dec. 1, 1881) a case of *post partum* hæmorrhage, in which the patient was in a state of extreme collapse, pulseless, respiration 42, cold extremities, etc., and could not be relieved by posture and stimulants. The left radial artery was exposed, divided, and the central end ligatured; a vulcanite cannula was passed into the distal end of the vessel, and through this, by means of a piece of India-rubber tube and a funnel, previously purified by immersion in carbolic lotion, 1,250 grammes of a six-tenths per cent. solution of sodium chloride, alkalinised by the addition of two drops of liquor potassæ, were injected in the course of an hour. During the transfusion, the patient rallied, the pulse was 122, and she finally recovered. He points out that there were none of the usual signs of oppression, etc., met with in other cases of transfusion. He thinks the amount injected should be at least 500 grammes (about a pint), and that liquor sodæ should by preference be used to render the solution alkaline. R. SAUNDBY, M.D.

PHYSIOLOGY.

RECENT PAPERS.

1. FRANÇOIS-FRANCK.—The Causes of the Normal Jugular Pulse. (*Jour. de Méd. de Paris*, No. 11, 1882.)
2. LONDON.—Absorption from the Bladder. (*Berl. Klin. Woch.*, 1881, No. 11.)
3. BUBNOFF and HEIDENHAIN.—The Phenomena of Irritation and Inhibition in the Motor Cerebral Centres. (Pflüger's *Archiv*, Band xxvi.)
4. LOVEN.—The Muscle-Tonus in Electric Irritation (*Arch. für Anat. und Phys.*, 1881.)
5. MARCACCI.—The Cortical Motor Centres. (*Comptes Rendus de la Soc. de Biol.*, Nos. 4 and 5, 1882.)
6. LESENEVICH.—Secretion of Milk in a Boy, Ten Months Old. (*Vracheb. Vedom.*, No. 10, 1882.)
7. CADET.—The Figurate Elements of the Blood. (*Jour. de Thérap.*, Feb. 10, 1882.)
8. LEWASCHOFF.—The Method of Hæmodynamic Experiments. (*Kun. Gaz*, No. 34, 1881.)

1. *François-Franck on the Causes of the Normal Jugular Pulse.*—M. François-Franck has communicated to the Société de Biologie (*Jour. de Méd. de Paris*, No. 11, 1882) the results of his experiments upon the production of this phenomenon. He finds that, when pericardial aspiration is excluded by opening the thorax, it persists; it persists, also, when the communication is momentarily interrupted between the right ventricle and the right auricle, and when

the ventricular systole is stopped by irritation of the vagus. It disappears when the systole of the auricle is produced by mechanical irritation or other means, and when the systole of the auricle is displaced so as to occupy a phase of the diastole. The venous pulse is also displaced. All these facts tend to the conclusion that the normal jugular pulse is produced by the systole of the right auricle.

2. *London on Absorption from the Bladder.*—Dr. B. London of Carlsbad (*Berl. Klin. Woch.*, No. 11, 1881) has made a series of chemical and histological investigations in Ludwig's laboratory, in order to determine the disputed point whether the mucous membrane of the healthy urinary bladder does or does not permit absorption. He found, on injecting into his own bladder weak solutions (½ per cent) of chloride of lithium and iodide of potassium, that traces of these could be detected in the saliva. As it has been said that distension of the bladder favours absorption, possibly by producing some mechanical alteration in the epithelium, he made a number of observations on the bladders of dogs, and found that no degree of distension caused either displacement or a solution of continuity of the epithelium, on account of its extraordinary elasticity, but that there was a decided change in the shape of the epithelial cells. R. SAUNDBY, M.D.

3. *Bubnoff and Heidenhain on the Phenomenon of Irritation and Inhibition within the Motor Cerebral Centres.*—This paper (Pflüger's *Archiv*, vol. xxvi, p. 137) contains observations confirmatory of those of François-Franck and Pitres, to the effect that electrical excitation suffers a delay in the cerebral grey matter, shewing that the cortex is a physiological conductor of that excitation. The authors state that sometimes, in the early stage of epileptic convulsions originating from localised cortical excitation, removal of the cortical centre of a limb may bring about quiescence of that limb. They remark that epileptic convulsions experimentally excited by cortical excitation always commence in muscles of the opposite side ; that, after removal of the cortex on one side, epilepsy produced by excitation of the subjacent white matter always commences on the same side, and that, after bilateral ablation of the cortex, subcortical excitation never provokes an epileptic attack. These observations go to demonstrate that experimental epilepsy is the manifestation of a cortical activity which can extend to the opposite side of the cortex by commissural fibres.

4. *Loven on the Muscle-Tonus in Electric Irritation.*—Loven (*Arch. für Anat. und Physiol.*, 1881, p. 363) was surprised to find that he could hear the sound of muscle tetanised by faradisation in any other part of the body, as well as over the muscle itself; and it was clear that this tone depended on something else than the vibrations of muscular contraction, since it might be heard on long dead animals. Seeking to determine the conditions of this electro-acoustic phenomenon, he found it necessary for its production that the animal and observer should be separated by a moderately thick non-conductor. He records experiments which show that the phenomenon may be a source of fallacy under the ordinary conditions of myophonic experiments; it is especially liable to happen if strong currents be used, or if the electrode contact be deficient. The way to guard against it is to establish a good conductor between animal and observer.

5. *Marcacci on the Cortical Motor Centres.*—Marcacci (*Comptes Rendus de la Soc. de Biol.*, Nos. 4 and 5, 1882) says that movements excited by electrical currents applied to the surface of the brain are not changed or suppressed by freezing the cortex, nor by anæsthesia short of the suppression of spinal reflexes, nor by paraplegia produced by annular congelation of the medulla oblongata, nor by ligature of the brachiocephalic and left carotid arteries. After such ligature, chloralisation, which can now only affect the spinal cord, abolishes the effect of surface-excitation. Excitation of the so-called motor centre of a posterior extremity, producing no effect after section of the nerve-roots supplying that limb, causes, after such section, movements of the anterior extremity of the same side. From these observations, the author concludes that the cortical grey matter is physiologically indifferent with regard to direct excitation.

A. WALLER, M.D.

6. *Lesenevich on Secretion of Milk in a Boy Ten Months Old.*—Dr. Lesenevich (*Vracheb. Vedom.*, No. 10, 1882) has under his observation a boy 10 months old, whose both mammary glands secrete a milky fluid, and have done so since the child's birth. The glands have the shape of roundish soft tumours, of the size of a large nut. On moderate pressure, a few drops of milk ooze out; on rather strong compression of the gland, the milk is ejected in form of a thin jet, reaching the height of about three feet. When the glands are left untouched during two or three hours, the secretion oozes by itself, leaving grey spots on the linen. The fluid gathered in a wine-glass did not differ in any way from a woman's milk. V. IDELSON, M.D.

7. *Cadet on the Figurate Elements of the Blood, and especially the Hæmatoblasts.*—The researches described in Dr. Cadet's thesis, published in Paris in 1881 (*Jour. de Thérap.*, Feb. 10, 1882) were made by the methods and under the direction of M. Hayem. In the first part of his thesis, M. Cadet relates the history of the hæmatoblasts. M. Hayem has described under this name special elements in the blood, differing from the white and the red corpuscles, and which are themselves destined to become red corpuscles. These small corpuscles—much smaller than the other figurate elements of the blood—are also extremely fragile. They require for their observation special precautions and liquids which do not destroy them. It is, therefore, easy to understand how, through accident, they should have remained long unknown. The hæmatoblasts have been counted in 140 persons under various conditions of age, sex, health, etc. Many enumerations both of the red and the white corpuscles have been made. According to M. Cadet, the general average of hæmatoblasts in the human species is 245,000 in the cubic millimètre; of the red corpuscles, 5,200,000; and of the white, 8,200. The blood of old persons shows no special characteristics; the average of their red corpuscles is, however, slightly inferior. In new-born infants, the average of the hæmatoblasts is 171,200; that of the red corpuscles, 5,696,000; and that of the white corpuscles, 19,400. It will be noted that these figures are very different from those which precede them. The blood of infants is in all respects similar to that of the adult. The blood of women is entirely comparable with that of men, and the figurate elements are found in the same proportions. Menstruation induces an increase in the number of hæmatoblasts, and in that of the red corpuscles. A rather considerable number of 'dwarf corpuscles' are found in the blood, and the richness in hæmoglobin is slightly decreased. Prolonged fatigue brings on a very notable diminution in the

number of the red corpuscles. Rest induces a sensible augmentation in the number of the hæmatoblasts, a diminution of the red corpuscles, and an increase in the white corpuscles. More or less prolonged fasting produces a decrease in the number of the hæmatoblasts, a notable increase in the number of the red corpuscles, and a decrease in the number of the white corpuscles.

9. *Lewaschoff on the Method of Hæmodynamic Experiments.*—In order to diminish the coagulability of the blood in hæmodynamic experiments, this author recommends the following procedure (*Klin. Gas.*, No. 38, 1881). Blood is taken from another animal, carefully defibrinated and filtered. Then one of the smaller arteries and veins of the animal to be employed are exposed. Blood is taken from the artery, defibrinated, filtered, and added to the already prepared blood. This blood is then injected into the vein, and, if necessary, this may be repeated. So much reduced by this method is the coagulability of the blood, that the author has observed, for six to seven hours, the intravenous blood-pressure without anything interfering with the experiment. Seeing that coagulation is thus rendered so difficult, any operation involving hæmorrhage had better be performed beforehand. No accident to the life of the animal has occurred in the hands of the experimenter. JAMES ANDERSON, M.D.

SYPHILOGRAPHY.

RECENT PAPERS.

1. GÜNTZ.—On the Duration of the Incubation-Period of Syphilis, with cases in which symptoms were delayed for an unusual length of time. (*Memorab.*, Heft 7, 1881.)

2. MANNINO.—A Case of Syphilitic Myocarditis. (*Giorn. Ital. delle Mal. Ven. e della Pelle*, Fascic. vi, Dec. 1881.)

3. RASORI.—Excision of an Indurated Sore twelve hours after its appearance. (*Ibid.*)

4. REBATEL.—Experimental Inoculation of Venereal Diseases on Animals. (*Lyon Méd.*, Jan. 8, 1882.)

5. WHITE, J. W.—The Prevention of Syphilis. (*Philad. Med. Times*, Jan. 14, 1882.)

6. OTIS, F. N.—Non-specific Gonorrhœa. (*New York Med Record*, Jan. 14, 1882.)

7. MITCHELL, C. J.—Gonorrhœa in the Male: its Nature, Causes, and Treatment. (*Med. and Surg. Reporter*, Feb. 18, 1882.)

8. NEUMANN.—Gumma of the Tongue. (*Allgem. Wiener Med. Zeitung*, No. 7, 1882.)

9. NEUMANN.—Syphilitic Ulceration of the Nose. (*Ibid.*)

10. AUBERT.—On Immediate Union after the Operation for Phimosis as a Complication of the Simple Chancre. (*Lyon Méd.*, Feb 26, 1882.)

11. RICHET.—On Caseous Epididymitis. (*Rev. Méd. de France et de l'Etranger*, March 4, 1882.)

12. RICHET.—Syphiloma of the Tongue. (*Gaz. Med. de Paris* March 11, 1882.)

13. FOX, G H.—On the Use of Mercury and other Remedies in the Treatment of Syphilis. (*New York Med. Jour.*, March 1882.)

14. WHITEHEAD, W.—On the Use of Iodoform in the Treatment of Soft Sores. (*Brit. Med. Jour.*, March 11, 1882.)

15. SIGMUND.—On the Best Mode of Administering Mercury in the Treatment of Syphilis. (*Wiener Med Woch.*, March 18. 1882.)

16. ROBERTS J. W.—The Relation of Syphilis to Scrofula. (*Phil. Med. Times*, March 25, 1882.)

17. ASHHURST, J JUN.—The Clinical History of Chancre and Chancroid. (*Ibid.*)

18. SNELL.—A Group of Syphilitic Inoculations caused by a Suckling Infant. (*Lancet*, April 1, 1882.)

19. LUBELSKI.—On the Propagation of Syphilis in Poland by the Circumcision of Jewish Children. (*Revue d'Hygiène et de Police Sanitaire*, July 1881, p. 577.)

1. *Güntz on the Incubation-Period of Syphilis.*—In this paper, Dr. J. E. Güntz of Dresden discusses at some length the usual duration of the incubation-period of syphilis (*Memorabilien*, Heft 7, 1881), according to statistics collected by various authors, and concludes by giving notes of three cases, one being an instance of reinfection, observed by himself, in which the interval between contagion and the appearance of general symptoms was of unusual length. Case 1. A man, aged 30, who had never had syphilis, contracted a sore which had the appearance of a simple excoriation, but which remained unhealed sixty days after contagion. Specific treatment was then begun, and the sore healed in a few days. On the sixty-fourth day, there was slight tenderness in the right groin, but this disappeared in two days. There was no trace of syphilis, and his general health was good. On the eighty-sixth day after contagion, he had enlargement of the right inguinal glands, pains in the limbs, and roseola. Case 2. A married man, aged 54, presented himself twenty-eight days after exposure to contagion, with an innocent-looking excoriation. Under mild specific treatment, the sore healed twenty-eight days later, leaving a smooth, non-indurated, but somewhat depressed scar. Specific treatment was then discontinued. There were no signs of syphilis, the general health and appearance were good, and continued so until the hundred and twenty-third day after the suspicious coitus, when the patient had intercourse with his wife, and afterwards noticed a hard and rather tender cord along the dorsum penis, together with a tender gland, of the size of a bean, in the right groin. At this time there was no sign of syphilis, no lesion of the penis or in any other situation, and the scar of the former sore had quite disappeared. The wife also was examined by Dr. Güntz, and found to be healthy. On the hundred and thirty-first day after the suspicious coitus, a macular syphilide appeared. Case 3. A man, aged 38, came under the author's care for syphilis, and was treated by mercurial inunction. He afterwards married, and had healthy children. Eight years after the first attack, the patient again came to Dr. Güntz with the following history. The last coitus had taken place ninety-six days ago. Six days ago, the patient noticed pain in the penis and a chancrous ulcer. The ulcer was dressed with iodoform, and seven days later (one hundred and third after coitus), was disposed to heal, but there was slight hardness about its base, together with tenderness in one groin. On the hundred and eleventh day the sore was rapidly healing, the inguinal tenderness had disappeared, and specific treatment was begun. Nine days afterwards (hundred and twentieth since coitus), the scar was slightly excoriated, and there was pain but no swelling in the groin, and there were no signs of syphilis. Three days later, the cicatrix was clearly indurated (cartilaginous) and there were several scattered raised syphilitic papules on the body. During the following week, more extensive signs of syphilis appeared. The author remarks that the mild specific treatment adopted in these cases is not, in his opinion, sufficient to account for the long incubation.

2. *Mannino on a Case of Syphilitic Myocarditis.*—

Dr. Mannino, of Palermo, reports the following case, in which syphilitic disease of the heart was diagnosed during life (*Giorn. Ital. delle Mal. Ven. e della Pelle*, Dec. 1881. A man, aged 36, was admitted into hospital, under the care of Dr. Federici, on Feb. 15, 1880. The patient stated that he had always enjoyed good health until eight years previously, when he contracted some venereal affection, which was followed by pains all over the body. He took iodide of potassium for a month, and was then able to resume his work; but since that time he had suffered every autumn and winter from a pustular eruption on the legs. With this exception his general health had been good, until a few months before admission, when he began to suffer from occasional difficulty of breathing. The attacks of dyspnœa gradually increased in severity; a troublesome cough appeared; and finally the patient became unable to work, and applied for admission into the hospital. On admission, the man was in a very weak state, his chief complaint being of difficulty in breathing. Cough was troublesome; the belly was swollen; both legs were œdematous and covered with coppery stains, scaly patches, pustules, and ulcers, which were considered to be of a syphilitic nature. Several groups of lymphatic glands were enlarged. The cheeks, lips and nose were blue; the great veins of the neck were prominent and turgid, while pulsation in the arteries was very weak. The skin of the trunk and neck had a mottled appearance, and the pulse was imperceptible at the wrist. The hands were cold. The heart's impulse was diffused, and pulsation was also visible in the epigastrium to the left of the sternal line. The exact situation of the apex-beat could not be defined, but the area of cardiac dulness was normal, the lowest limit being the fifth intercostal space. At the apex the first sound was obscure, and accompanied by a very faint blowing murmur. At the base, and in the second right intercostal space, the *bruit* was somewhat louder; but was much more distinctly heard in the epigastrium than elsewhere. The diastole was weak, but clear. The percussion sound was normal over the front of the chest; the posterior thoracic parietes were œdematous. The respiratory sounds were normal, except in a few places where slight mucous *râles* were audible. The area of dulness was the liver and spleen somewhat increased. The urine was scanty, acid, specific gravity 1,025, and contained traces of albumen. From these various signs, Dr. Federici diagnosed that the muscular structure of the right side of the heart was chiefly at fault, and that the disease was probably of a syphilitic nature. In spite of hypodermic injections of mercury, and large doses of iodide of potassium, the attacks of dyspnœa became more and more severe, especially at night; but the patient slept fairly well in a semi-erect position. The pulse was regular and about normal as regards frequency; but pulsation could never be felt in the radials, and even in the larger vessels, such as the femoral, was very weak indeed. The respiration was always accelerated (sometimes thirty per minute), and chiefly abdominal in character. The temperature was usually below normal. During the next few days the *bruit* gradually became fainter and fainter; but was always heard best at the epigastrium. The sputa became bloody, the dyspnœa more and more urgent, until, finally, the patient died rather suddenly, soon after a meal, nine days after his admission into the hospital. *Post mortem*, the pericardium contained about 3 ounces of clear serum. The heart was globular in form, and weighed nearly 14 oz., the enlargement being due more to the left than the right ventricle. On the anterior surface of the right ventricle was a patch of fibrous induration, 8 centimètres long and 3 centimètres broad. On the left ventricle was a similar patch, of the size of a five-franc piece; and other smaller indurated patches were scattered over the surface. A hard fibrous cord, studded with nodules, followed the direction of the interventricular septum. All these parts were pale in colour, resisted the knife, and creaked on section. The tricuspid valve was healthy, with the exception of a slight enlargement on one of the cusps. The endocardium was opaque in patches. The left ventricle was considerably dilated, and the endocardium of the conus arteriosus was white, hard, and glistening, like cartilage. The musculi papillares of both ventricles were pale and shrunken. Under the microscope, the affected portions of the muscular substance showed the usual appearances of syphilitic myositis. The lungs were adherent in some places, emphysematous in others, and contained numerous infarcts. The liver showed a patch of syphilitic interstitial hepatitis in an early stage. The spleen was enlarged and rather hard, its capsule being opaque and partially adherent to the thoracic wall. The kidneys were much congested. The other organs of the body, as well as the larger blood-vessels, were healthy.

3. *Rasori on Excision of an Indurated Sore Twelve Hours after its Appearance.*—Dr. Enrico Rasori of Rome relates the particulars of a case (*Giorn. Ital. delle Mal. Ven. e della Pelle*, Dec. 1881), in which he excised the initial lesion of syphilis within twelve hours of its appearance, without preventing, or, as far as could be judged, in any way modifying, the subsequent symptoms of the disease. This initial lesion, which was on the inner surface of the prepuce, and had the form of a slightly elevated lenticular papule, appeared twenty-eight days after contagion. Excision was performed the same day. The wound healed in twenty-five days, and roseola appeared forty-eight days after the excision, or seventy-six after contagion. The inguinal glands became somewhat enlarged nine days after coitus, in connection with irritation produced by the application of some so-called preventive by the patient himself; and this enlargement continued during the incubation-period. [The exact condition of the glands at the time of excision of the sore is not stated.—*Rep.*]

4. *Rebatel on the Inoculation of Venereal Diseases on Animals.*—In a paper read before the Society of Medical Sciences of Lyons (*Lyon Méd.*, No. 2, 1882), M. Rebatel relates the results of numerous experiments by himself, as well as of others carried out by M. Blanc, an *interne* of the Lyons Hospital. As regards *gonorrhœal pus*, the author states that in a large number of dogs, rabbits, and guinea pigs, he placed the matter in contact with the mucous membrane of the eye and of the glans penis, besides, also, injecting it into the urethra with a syringe. In all these cases, as well as in others experimented on by M. Blanc, the result was entirely negative, no trace of inflammation being set up. With the pus of the *simple chancre*, also, a very large number of experiments were made, and, although every precaution was taken to keep the chancrous pus in contact with the site of inoculation, no ulcer of any kind was ever produced. M. Blanc also experimented, independently of M. Aubert, in various ways. Thus, in M. Blanc's first group of fourteen experiments on dogs and rabbits, the chancrous matter was inserted

beneath the skin with a bistoury, on various parts of the body, which had been previously shaved. In a second series of eleven cases, the pus was deposited on a shaved surface, which was then scarified. In a third series of nine cases, after inoculation with a bistoury, the part was thoroughly protected with collodion and gold-beater's skin until the next day. In eighteen experiments, again, chancrous pus, varying in quantity from half a drop to ten drops, was injected beneath the skin. In some of the cases, also, the point of inoculation was irritated with various substances to imitate the conditions under which Auzias Turenne's experiments were carried out. Finally, in one case, an inguinal gland was exposed, and pus from a virulent bubo was injected into its substance. The wound healed by adhesion, and, three days afterwards, all traces of the operation had disappeared. Numerous experiments with the *syphilitic virus* were also invariably unsuccessful. In one case of this kind, a small incision was made in each groin of a young and healthy bitch. The cellular tissue was then slightly separated by means of a director, and two indurated syphilitic sores, which had been excised just before, were introduced, and the wounds closed by sutures. Union by first intention took place. A little swelling remained for a few days, but at the end of a week had quite disappeared. The glands of the groin did not become enlarged, and the animal, though kept under observation for many months, showed no further symptoms. About the same time, M. Rebatel injected into the jugular vein of a young dog about 150 grammes of defibrinated blood from a patient, in whom secondary symptoms were in full activity. This animal, again, showed no signs of syphilis. The offspring of these two animals, also, procreated after the performance of these experiments, were perfectly healthy.

5. *White on the Prevention of Syphilis.*—In this address, which was read before the County Medical Society of Philadelphia (*Philadelphia Med. Times*, Jan. 14, 1882), Dr. J. W. White ably discusses the question of legislative interference for the prevention of the spread of venereal diseases, and adduces numerous facts and statistics, including some of those lately brought before the Select Committee of the House of Commons in this country, which clearly show the value of preventive measures in checking the prevalence of disease wherever they have been properly carried out. Dr. White brings forward ample evidence in support of his plea for the introduction of some such measures into his own country. Dr. White's paper is also published separately in the form of a pamphlet.

10. *Aubert on immediate Union after Circumcision for Phimosis complicating simple Chancre.*—M. Aubert reports (*Lyon Méd.*, No. 9, 1882) six cases in which he obtained primary union after circumcision for phimosis with soft chancres. In two cases there was œdema, and in one lymphitis, and abscess of the penis. The following is M. Aubert's method of operating. All the surrounding parts are cleansed with carbolic lotion. The penis is then passed through a hole cut in a large sheet of India-rubber sheeting, so that discharge and blood may not collect among the pubic hair, and so become a source of re-inoculation of the wound. The patient is then anæsthetised, and all the sores which are within reach are touched with the thermo-cautery. This having been done, the prepuce is divided at one or more places (several shallow cuts being better than one long one, in order that the incisions may all be included in the subsequent circumcision wound), until it can be fully retracted. The parts are then again washed with carbolic lotion, and all the remaining chancres are cauterised. The operator and his assistants now cleanse their hands, and circumcision is performed with fresh instruments and clean sponges, etc. Lastly, the edges of the wound are united with sutures in the ordinary way. No re-inoculation of the wound occurred in any of the six cases; and the author suggests that, if his method of operating be adopted, circumcision is applicable not only to bad cases, but also to those where phimosis is the only complication.

11. *Richet on Caseous Epididymitis.*—Professor Richet, in a clinical lecture published in the *Revue Méd. de France et de l'Etranger*, March 4, 1882, remarks that Louis long ago recognised a local tuberculosis of the genital organs, as well as the form which is associated with general tuberculosis. The case which formed the subject of these remarks was that of a young man, who came under M. Richet's care, after repeated attacks of gonorrhœa, with enlargement of both testes, which was at first thought to be due to syphilis, but, as long-continued specific treatment had no good effect, the man was admitted into hospital in the following condition. Both testes and both spermatic cords were enlarged and nodular. There was double hydrocele. The prostate was irregular, and the right vesicula seminalis enlarged. On pressure per rectum, a bloody fluid exuded from the urethra. With all these signs of extensive disease of the generative organs, the patient's health remained good; he had no cough, and there were no signs of disease of the lungs. Hence, M. Richet diagnosed a localised caseous epididymitis set up by gradual extension of gonorrhœal pus along the vas deferens to the prostate, and gave a favourable prognosis. The treatment proposed was to tap the hydroceles and inject them with iodine, and to administer iodine internally; and under this treatment the author expected the patient to recover, as had happened in several similar cases under his care, at least as regarded the general health, the function of the testes being, of course, in all probability destroyed. In one case, M. Richet had excised the useless organs.

18. *Snell on a Group of Syphilitic Inoculations Caused by a Suckling Infant.*—Mr. Simeon Snell of Sheffield reports (*Lancet*, April 1, 1882) the particulars of several cases of syphilis, which well show the disastrous consequences of allowing a healthy woman to suckle a syphilitic child. The main points of the cases are briefly as follows. A healthy woman, aged 26, whose own child was three weeks old, was engaged as wet-nurse to a baby, aged three months, suffering from diarrhœa, emaciation, 'thrush', and a rash on its body. This child was the ninth, and all the others of the same family had been either still-born or had died in infancy. During one night the nurse suckled both her own baby and that of her employer at the same (right) breast; but next day her own baby was sent back to Sheffield to be suckled by its grandmother, who also had an infant of her own a few weeks old. The wet-nurse retained her situation, and, continued to suckle the strange baby for about a fortnight, when, hearing that her own child was ill, she returned home and again suckled it. Shortly after her return, she noticed a soreness at the upper part of the right breast, and, as this soreness caused discomfort when the child was put to the breast, it was again partially suckled by its grandmother. A sore, however, soon

appeared on the child's upper lip. This was followed by 'thrush', and the child eventually died. The originally syphilitic child recovered under mercury. The grandmother also contracted syphilis, and came to the Sheffield Infirmary with an indurated sore of the right breast, which was followed by general syphilitic symptoms, among others, iritis, for which she subsequently came under Mr. Snell's care. Her own child, however, appeared to have escaped. It is worthy of remark, that this child was nearly weaned when she began suckling her grandchild, and that she always suckled her own baby at the left breast, reserving the right exclusively for her grandchild. Thus, at least three persons, viz., the wet-nurse, her child, and her mother, became syphilitic through the suckling of a child well known to be diseased. The nurse is stated to have been warned of the risk she incurred, and was desired, if she remained, as the parents were anxious for her to do, to be particularly careful and cleanly as to the breast. Besides these known cases of syphilis, another wet-nurse had been employed before the one now in question, and her child was found, by subsequent inquiry, to have died, but, beyond this, nothing further was ascertained. The facts above-mentioned came to Mr. Snell's knowledge partly through the wet-nurse's mother, who came to him with iritis, and subsequently through the wet-nurse herself, and partly through the medical attendant of the family for whose syphilitic child the wet-nurse was engaged.

19. *Lubelski on the Propagation of Syphilis in Poland by the Circumcision of Jewish Children.*—In this paper (*Rev. d'Hygiène et de Police Sanitaire*, July 1881, p. 577) Dr. Lubelski of Warsaw, refers only to the writings of others. Thus, he states that in 1833 Bierkowski of Cracow reported more than a hundred cases, in which syphilis had been communicated to children by suction of the wound by the operator after circumcision. In 1864 and 1865 Nowakowski reported numerous cases of a similar kind. In 1880 there was published in the Polish journal *Medycyna*, No. 26, a series of cases, but no particulars are given in the present article.

ARTHUR COOPER.

DISEASES OF THE THROAT.

RECENT PAPERS.

1. HALL.—A Case of Primary Perichondritis of the Larynx. (*Brit. Med. Jour.*, May 6, 1882.)

2 SCHIFFERS.—The Employment of Iodoform in Laryngeal Affections. (*Rev. Mens. de Laryngol.*, April 1882.)

3. BIRD.—The Treatment of Laryngeal Phthisis. (*New York Med. Record*, Jan. 14, 1882.)

4. LAWRENCE.—The Treatment of Diphtheria. (*Brit. Med. Jour.*, March 11, 1882.)

5. ATKINSON.—The Treatment of Diphtheria. (*Ibid.*, February 25, 1882.)

6. ALBERT.—Laryngeal Stenosis. (*Allg. Wien. Med. Zeit.*, No. 51, 1881)

7. WHITE.—Œdema of the Vocal Cords secondary to Aneurism of the Ascending Arch of the Aorta. (*Ibid.*)

8. HALLEZ.—Subacute Œdema of the Epiglottis, and of the Epiglottidean Folds. (*Bull. Méd. du Nord*, Dec. 12, 1881.)

9. TORRANCE.—Chronic Œdema of the Epiglottis, causing great Difficulty of Deglutition, cured by Scarification. (*Brit. Med. Jour.*, Feb. 25, 1882.)

10. MOORE.—Ulceration of the Epiglottis in a Case of Typhoid Fever. (*Ibid.*, May 20, 1882)

11. KRISHABER.—Additional Remarks on Laryngotomy. (*La France Méd.*, April 4. 1882.)

12. HUTCHINSON.—On Calcified Bronchocele. (*Brit. Med. Jour.*, May 13, 1882.)

13. SEMON.—Two Cases of Laryngeal Growths, successfully removed by Endolaryngeal Operations, with the Aid of the Galvano-Caustic Method. (*Ibid.*, May 27, 1882.)

14. HOLMES.—Thyrotomy for the Removal of a Foreign Body impacted in the Interior of the Thyroid Cartilage. (*Ibid.*)

15. DELAVAN.—Primary Epithelioma below the Vocal Cords. (*New York Med. Record*, Dec. 1881.)

16. DELAVAN.—A Case of Primary Epithelioma of the Tonsil. (*New York Med. Jour.*, April 1882.)

17. BISHOP.—The Treatment of Hypertrophy of the Tonsils. (*Brit. Med. Jour.*, Feb. 25, 1882.)

18. STUDDERT.—NewTonsil-Forceps. (*Ib.*, Mar. 25, 1882.)

19. ALBERT.—Stenosis of the Pharynx in Tonsillar Angina. (*Allg. Wien. Med. Zeit.*, Nos. 1 and 2, 1882.)

20. COLIN.—Large Tumour on the Base of the Tongue menacing Life. (*Mens. de Laryngol.*, April 1882.)

21. HOBSON.—Case of Labio-Glosso-Laryngeal Paralysis. (*Brit. Med. Jour.*, April 29, 1882.)

22. PETIT.—Some Considerations on Nasopharyngeal Polypi and their Propagation in the Brain. (*Rev. Mens. de Laryngol.*, April 1882.)

23. DELAVAN.—Nine Cases of Tumour of the Nasal Septum Anteriorly. (*Archives of Laryngol.*, April 1882.)

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1. *Hall on a Case of Primary Perichondritis of the Larynx.*—Dr. Hall read the notes of this case at the Clinical Society (*Brit. Med. Jour.*, May 6, 1882). He brought it forward, as there were none of the usual exciting causes of perichondritis present. He therefore concluded that it was an instance of primary perichondritis. There was no history of syphilis, typhoid, or typhus fever, no suspicion of phthisis, nor account of any injury. The patient was not cachectic, but well nourished. He had had a cough and hoarseness for some time, which had come on quite suddenly; after this, there was pain in swallowing and in the region of the thyroid; later, difficulty of breathing, expectoration of blood and pus, and paroxysms of severe dyspnœa. Tracheotomy was performed. After the operation, the epiglottis was found to be intact, but the glottis narrowed in all its diameters. After treatment, he somewhat improved, but was unable to dispense with the cannula. Recently, he had expectorated two portions of necrosed cartilage, and was still under treatment.

2. *Schiffers on the Employment of Iodoform in Laryngeal Affections.*—Dr. Schiffers (*Revue Mensuelle de Laryngol.*, April 1882) has for some time made use of pulverised iodoform in various tubercular affections of the larynx, always with good results. The powder adheres easily to the parts where it is applied, and forms a kind of coating after it has become mixed with the mucous secretion. It is best to dissolve it in ether, as in this way a larger quantity can be used at a time.

3. *Bird on the Treatment of Laryngeal Phthisis.*—Dr. Bird (*New York Med. Rec.*, Jan. 14, 1882) recommends inhalations of hydrastine with glycerine, borax, and morphia, in laryngeal phthisis.

8. *Hallez on Subacute Œdema of the Epiglottis and of the Epiglottidean Folds.*—A child, 20 months old (*Bull. Méd. du Nord*, No. 12, Dec. 1881; *Revue Mensuelle de Laryngol.*, April 1882), was suddenly seized with pain in the mouth and throat, and inability to swallow. Ten hours afterwards, an œdematous swelling of the anterior aspect of the epiglottis and of the epiglottidean folds was perceived. There was fever, but no respiratory trouble what-

ever. Dr. Hallez incised the swelling of the epiglottis, and applied a blister to the neck. Prostration became more and more pronounced, and the child died without any attack of suffocation or the least appearance of dyspnœa. No necropsy was made. The infiltration was œdematous and not sanguineous, and, after incision of the epiglottis, only a little serum, slightly sanguineous, came away.

10. *Moore on Ulceration of the Epiglottis in a case of Typhoid Fever.*—At a meeting of the Pathological Society (*Brit. Med. Jour.*, May 20, 1882), Dr. Norman Moore showed a case of ulceration of the epiglottis from a patient, aged 26 years, who had died of typhoid fever. The ulceration was at the upper edge, and was associated with a small local necrosis. The larynx was otherwise normal.

11. *Krishaber on Laryngotomy.*—Dr. Krishaber (*La France Méd.*, April 4, 1882), in answer to certain objections that have been made to this operation, sums up his remarks as follows. 1. Laryngotomy has the advantage over tracheotomy of extreme facility of execution, by reason of its two fixed landmarks—the pomum Adami and the cricoid cartilage—and the superficial situation of the crico-thyroid membrane. 2. A vertical incision suffices for introducing a cannula. 3. The operation may be performed by the bistoury or the thermo-cautery, the latter being the best safeguard against hæmorrhage and the escape of blood into the trachea. 4. The cautery should be heated to a dull red heat. 5. The division of the tissues by its means should be made by successive puncturings, and not by scarification, so as to avoid resulting scars and secondary hæmorrhages when the latter come away. 6. The *cannula à bec* dispenses with the necessity of a dilator, which it would be almost impossible to use in the crico-thyroidean space. The only critical moment when opening the trachea is thus avoided. 7. The indefinite presence of a cannula in the crico-thyroidean space does not produce any alteration in the voice, nor any lesion of the laryngeal cartilages.

12. *Hutchinson on Calcified Bronchocele.*—Mr. Hutchinson showed at the Pathological Society (*Brit. Med. Jour.*, May 13, 1882) a patient who had a small sinus leading down to a calcified mass, evidently connected with the thyroid gland. The bronchocele had existed from childhood, and the calcification had occurred in middle life. Mr. Hutchinson had seen calcification of a bronchocele previously, but had not before had any experience of a calcifying tumour of this nature becoming necrosed.

13. *Semon on Two Cases of Laryngeal Growths in which the Neoplasms were Successfully Removed by Endolaryngeal Operations, with the aid of the Galvano-Caustic Method.*—The first case, shown at the Royal Medical and Chirurgical Society (*Ibid.*, May 23, 1882), was one of multiple sessile papillomata occurring in a lady aged 20. The symptoms were complete aphonia and slight dyspnœa on exertion. The growths were partly above and partly below the glottis. The former having been removed with forceps, the latter were destroyed by means of a suitably bent galvano-cautery introduced during full inspiration. The voice was restored, and no return had occurred four months after the operation. In the second case, a large hard broad-based fibroma occurred in a man aged 33 years, and had been growing for ten years. The growth nearly filled the aperture of the glottis, and was attached to the anterior commissure and right vocal cord. It was removed by means of the galvano-cautery loop, and the patient made a good recovery. Dr. Semon thinks that these cases show that multiplicity, subglottic position, tendency to return, and large size of the growth, do not contraindicate, as thought by some, the intralaryngeal method.

14. *Holmes on Thyrotomy for the Removal of Foreign Body Impacted in the Interior of the Thyroid Cartilage.*—At the same meeting of the Royal Medical and Chirurgical Society as that at which the above cases of Dr. Semon were read (*Ibid.*), Mr. Holmes related the history of a case, in which a large and rough piece of bone was impacted in the neighbourhood of the left vocal cord for seven days before removal. Attempts to extract it with the laryngeal forceps having failed, laryngo-tracheotomy was performed on the fifth day; and as this also failed, the thyroid cartilage was split on the seventh day and the bone removed. The irritation of the foreign body set up inflammation of the mucous membrane of the larynx and trachea. This spread downwards, and the patient died nine weeks after the operation, of gangrenous abscess of the lung. Before death, the wound had nearly healed, and the voice had almost returned. Mr. Holmes, after discussing the subject of thyrotomy, drew the following conclusions. Very large substances may be impacted, either in the ventricle or between the alæ of the thyroid cartilage, without causing any symptoms of immediate urgency. 2. When such substances are rough or pointed, they sometimes give rise to a spreading inflammation of the mucous membrane, and in such cases should be removed as soon as possible. 3. If they can be seen and touched, they can usually be removed from the mouth either whole or piecemeal. 4. When this is found impossible without tracheotomy, an opening should be made through the crico-thyroid membrane and upper rings of the trachea; 5. After this operation, it is quite possible that the spasmodic contraction of the parts about the glottis may subside, and a renewed attempt at extraction be successful. 6. If this be impossible, the foreign body may perhaps be extracted or displaced from the tracheal wound, so that a preliminary tracheotomy is always advisable. 7. On the failure of such attempts, the thyroid cartilage is to be laid open in the middle line—partially from below upwards if the body is small, and can be felt lying near the wound—entirely and from above downwards if the body is large, firmly impacted, and lying out of reach from the tracheotomy wound. 8. The operation of thyrotomy involves little danger to life, and not much to the integrity of the voice; at least, the risk of damage to the vocal cords is much greater from the protracted irritation of the foreign body than from the operation.

15. *Delavan on Primary Epithelioma below the Vocal Cords.*—The author (*New York Med. Rec.*, Dec. 1881) records the case of a man, aged 54, without any history of syphilis, rheumatism, or alcoholic excess, who had for three years suffered from hoarseness, which had increased rapidly four months before admission, accompanied by pain in the throat and cough. On laryngoscopic examination, the mucous membrane was found swollen, especially the right ventricular band; the right side of the larynx was immovable during respiration; the left side moved in the normal manner. The trachea appeared healthy. Three days after this first examination, dyspnœa came on suddenly. Tracheotomy was performed, but the patient died six hours after the operation. On the *post mortem* examination, a nodular and rather hard tumour, about thirty-seven

millimètres in diameter, was found near the right vocal cord, and entirely covered by it, on a level with the lower part of the right ala of the thyroid cartilage. The abductor muscles were normal. The growth was found to have an epithelial structure. The author remarks upon the difficulty of making a right diagnosis in this case, as all the characteristic symptoms of cancer of the larynx were wanting. He believes death to have been due to bilateral paralysis of the posterior crico-arytenoid muscles, coming on suddenly from reflex causes.

16. *Delavan on a Case of Primary Epithelioma of the Tonsil.*—Dr. Delavan states (*New York Med. Jour.*, April 1882) that he has been able to find only three authentic cases of primary epithelioma of the tonsil, but thinks that their scarcity may be due to the confusion that has prevailed in the nomenclature of tumours. He appends a tabular statement of all the cases (42) of malignant tumour of the tonsil that he has been able to find after a careful search through the literature of the subject. The feature of greatest importance in Dr. Delavan's case, was the intense reflex pain in the ear of the affected side, which occurred long before any symptoms was discovered in the tonsil itself, and which completely misled the competent specialist who had had the case for several weeks under his direct observation. Four weeks after the appearance of the pain, an enlargement of the right tonsil was noticed, followed by ulceration of its surface and swelling below the jaw on this side. Pain and dysphagia increased. When the patient was examined, it was found that the left tonsil was entirely destroyed; the right tonsil was much enlarged and infiltrated, but its surface was still unbroken. The ulceration extended upwards towards the vault of the pharynx over the orifice of the Eustachian tube, and downwards to the base of the tongue and right border of the larynx. The right arytenoid, cartilage, false cord, etc., were also invaded, and their motion was distinctly impaired. No operation was attempted, and the patient died six months after the first appearance of the disease.

20. *Colin on a Case of a Large Tumour on the Base of the Tongue Menacing Life.*—The patient, aged 52 (*Revue Mens. de Laryngol.*, April 1882), had suffered for eight months from an affection of the throat. The last two months, the symptoms had increased so that he could not breathe when he lay down, nor could he swallow solid food. Hearing was also affected. On laryngoscopic examination, a tumour was discovered, apparently springing from the base of the tongue. Ineffectual attempts having been made to remove it with the *écraseur* and forceps, it was seized with the fingers and twisted off. The growth, presumably a papilloma, was of the size of a small mandarin orange, reddish-grey in colour, smooth on the surface, lobulated, soft and friable. It had apparently grown from a pedicle of the thickness of a finger.

22. *Petit on some Considerations on Naso-Pharyngeal Polypi and their Invasion of the Brain.*—Dr. Petit draws the following conclusions in an original work on the subject. 1. Naso-pharyngeal polypi have a marked tendency to invade the interior of the skull. 2. The diagnosis of the penetration of these tumours into the skull does not rest on any sure signs. 3. Certain tumours in the neighbourhood of the base of the skull have led to the belief that perforation of the base has occurred, without such being the case. 4. When invasion of the brain is feared, all operations must be abstained from until the tumour hinders some important function, such as respiration or nutrition. 5. When once an operation is thought necessary, only those portions of the tumour should be removed that cause the functional trouble. Beyond this, palliative treatment only should be adopted.

12. *Delavan on Nine Cases of Tumour of the Nasal Septum Anteriorly.*—Judging from the scarcity of literature upon the subject, says Dr. Delavan (*Archives of Laryngol.*, vol. III, No. 2, April 1882), and the comparative rarity with which such cases are seen in clinical practice, tumours of the anterior nares are rare. That they do occur, and that their presence may be attended by such important, and even by such disastrous results as to make them worthy of especial consideration, is evident from the history of the following cases. Case 1. The patient was a boy, aged 16 years. The tumour occupied the right side of the septum, nearly opposite the middle turbinated bone, and entirely occluded the nostril. It was nodular, dull purple, moderately firm, and distinctly pedunculated. Hæmorrhage had been frequent and severe, but pain had at no time been great. The tumour was easily removed with the Jarvis's *écraseur*. It was apparently a lymphadenoma; in reality, it was a pure fibroma, the unusual proliferation of the lymphoid element being the result of the constant mechanical irritation to which the tumour was subjected. Case 2. The patient was a woman, aged 30, who had been subject to epistaxis since a child. The tumour, having a diameter at its base of three-quarters of an inch, and an apparent elevation of three-eighths of an inch, was situated at the junction of the septum with the ala, three-quarters of an inch from the meatus. It had grown slowly and without pain for two years, and there had been occasional epistaxis, sometimes severe and long-continued. It was red in colour, nodular, and bled at the slightest touch. The naso-pharyngeal mucous membrane was in a generally hyperæmic condition. The growth was removed by means of a cup-shaped curette. It instantly collapsed, so that the fragment that remained was too small to afford a satisfactory examination. It appeared to be a vascular myxoma. The resulting abrasion of the mucous membrane has never entirely healed. Case 3. The patient was a woman, aged 60. A large ovate tumour grew in the middle of the nasal cavity, almost occluding both nostrils. It was firm, indistinctly nodular, and bluish-grey in colour. It first made its appearance on the right side of the septum four years ago; then made its way through the septum, and appeared on the left side. It had caused neither pain nor epistaxis. It was attached by a pedicle to the anterior margin of the vomer, at its junction with the cartilage of the septum; what should have been the cartilaginous septum, was for the most part an extensive perforation, the septum having apparently receded before the tumour by the process of absorption. No further history of the case was obtainable, the patient not having again appeared. Case 4. The tumour, an enchondroma, projected from the septum of an infant, aged 8 months, and extended backwards as far as the anterior border of the vomer. It had been growing gradually for five months, coming on after a severe blow. In five cases treated by Professor Lefferts, the ages of the patient varied between 15 and 25, and the majority were females. The tumour was always located on the septum, on the right side in four, on the left in one, and well down towards the junction of the mucous membrane with the skin. The one symptom complained of, and the one which

alone, except in one instance, had attracted the patient's attention to the condition, was repeated epistaxis, sometimes difficult to check. In the one exceptional instance, the papillomatous tumour was so large as to block up the nares completely, and to appear at its external orifice. In the other cases, the size of the tumour was variable, but never exceeded a good-sized pea. All appeared to be papillary growths, but no microscopical examination was made. The treatment in all cases consisted in evulsion of the tumour, and cauterisation. In no case was there any recurrence. W. J. WALSHAM.

OPHTHALMOLOGY.

RECENT PAPERS.

1. CHISHOLM.—Malignant Tumour of the Sphenoidal Cavities implicating Vision. (Knapp's *Archiv*, vol. xi.)

2. KNAPP.—Croup of the Conjunctiva. (*Ibid.*)

3. BETTMAN.—The Condition of the Eyes in Pernicious Anæmia. (*Ibid.*)

4. HOBBY.—Quinine Amaurosis. (*Ibid.*)

5. DERBY.—Hydrophthalmus treated by Iridectomy. (*Ibid.*)

6. HOTZ.—An Unusual Effect of Calomel on the Eye. (*Ibid.*)

7. HOLMES and PARK.—A Severe Injury of the Orbit. (*Ibid.*)

8. DUJARDIN.—On Albuminoid Exudation on the Cornea. (*Recueil d'Ophthal.*, April 1882.)

9. PARENT, H.—On the Reflection of Oblique Rays. (*Recueil d'Ophthal.*, April 1882.)

1. *Chisholm on Malignant Tumour of the Sphenoidal Cavities, implicating Vision.*—Dr. Chisholm records (Knapp's *Archives*, vol. xi, No 1) two interesting cases of tumour of the sphenoidal cavities, which have recently come under his observation. The first occurred in a boy, aged 7, and resulted in death within eighteen months. The second occurred in a man aged 37, and is still under observation. In the first case there was throughout a complete absence of pain. The earliest symptoms were nausea, vomiting, and headache; but these ceased after vision had become affected. In both cases the disease extended from right to left, and in neither was there any general paralysis, nor any evidence of extensive encroachment by the growth in the direction of the cranial cavity. The loss of smell was secondary to that of sight in the case of the boy, while in the elder patient it was retained even after the growth had invaded the left orbit. In the right eye it had been destroyed at a comparatively early period by pressure on the optic nerve. In the former case there was external squint with ptosis, in the latter internal squint followed by ptosis. In both cases the mind remained clear throughout; but in the second case the sufferings of the patient were excessive. In each case the growth could be felt by the finger, as an elastic mass within the orbit.

2. *Knapp on Croup of the Conjunctiva.*—Dr. H. Knapp of New York records two interesting cases of an unusually severe form of croupal conjunctivitis. (*Archives of Ophthal.*, vol. xi, No. 1). The consideration of these cases has induced him to reconsider his already published views on croupous inflammation of the conjunctiva, and to believe with Arlt, Sämisch, and Wecker, that in some cases at least the affection must be considered as a distinct form of inflammation. The first case occurred in a boy nine years of age. Four weeks previously, he had caught ophthalmia in a public institution. When seen, the sight of one eye had already been destroyed, and that of the other was rapidly tending to extinction. On admission, the lids of both eyes were red, lustrous, swollen, and not particularly painful to the touch. The palpebral conjunctivæ were covered with thick coherent white membranes, which, when wiped away, left an uneven dark red bleeding surface. The cornea of the right eye was absent, and the place it should occupy was filled with a similar kind of membrane, which, however, could not be wiped off. The cornea of the left eye was intact, and the patient's general health good. Iced compresses were applied day and night, and the eyes cleansed every half-hour. Under this treatment the case remained materially unchanged for ten weeks, the membranes returning almost as quickly as they were removed. At the end of this period, however, there was a recrudescence of all the symptoms, the left cornea becoming infiltrated, the iris congested, the pupil immovable, and sight reduced to perception of light. Ice compresses and atropia were freely employed, and later on sulphate of copper. The right eye was lost, but the left recovered vision = 20-70. The second case occurred in a boy aged five years. Assuming at first the characters of the so-called proliferating form of mucopurulent conjunctivitis, thick tough membranes were later formed, but readily cast off. Treatment by escharotics and astringents failed, and eventually the right cornea was completely destroyed. The other eye was saved. Dr. Knapp considers that these cases go far to establish the specific character of croupous inflammation as distinguished from diphtheritic, to which it is most nearly allied. It differs from catarrh, blennorrhœa, and trachoma by the presence of the characteristic white membranes, and from diphtheria in the following respects. 1. In diphtheria the lids are stiff and hard, and can with difficulty be everted. In croup they are soft and supple, and can be easily everted. 2. The diphtheritic lid is unusually hot and painful; the croupous lid can be handled without causing much pain. 3. The diphtheritic exudations are interstitial, the croupous superficial. 4. The diphtheritic exudatim cannot be readily removed, but must be torn off, leaving the subjacent tissue pale and ragged; the croupous membrane can be wiped off as a whole, leaving the subjacent tissue dark red, bleeding, and uneven. 5. The tissue of the diphtheritic lid when cut into is anæmic; the croupous is highly congested. 6. The diphtheritic lid tends to mortification; the croupous to proliferation or polypoid excrescences. 7. Diphtheria readily extends from the lids to the bulbar conjunctiva; croup is limited to the lids, only attacking the cornea in the severest cases, but always avoiding the scleral conjunctiva. Dr. Knapp considers that the great point in treatment is the avoidance of all irritant medication, so long as the formation of the pseudo-membranes is still active. Uninterrupted application day and night of iced compresses to the lids, and the careful washing away of the secretion with a soft sponge, while the inflammation is progressing, is of the utmost importance. In the acute stage, the essence of treatment should be the abstinence from all but indifferent local remedies, methodical and uninterrupted application of cold, and careful cleansing. In the stage of decline the same

treatment in a milder form; in torpid and protracted cases, astringents or mild caustics. The treatment with ice compresses is often very successful in chronic cases of trachoma, where the cornea has apparently become hopelessly dimmed.

3. *Bettman on the Condition of the Eyes in Pernicious Anæmia.*—Dr. Boerne Bettman (Knapp's *Archiv.*, vol xi, i) had recently an opportunity of examining under peculiarly satisfactory conditions the eyes of two patients in whom pernicious anæmia had proved fatal. The ophthalmoscopic appearances observed during life resolved themselves generally into paleness of the papillæ and fundus, a cloudiness of the retina, diminishing in intensity towards the periphery, and a loss of the characteristic appearances of the veins and arteries, together with the presence of white spots not unlike what is seen in albuminuric retinitis. Microscopically, the most interesting changes observed in the retina were (1) rupture of the membrana limitans interna; and (2) the presence of numerous clusters of varicose nerve-fibres. As to the explanation of the latter phenomenon, the author in the main agrees with that given by Roth, viz., that it is due to transudation, either of serum or lymph, producing swelling of the nerve-fibres. As to the rupture of the internal limiting membrane, Dr. Bettman thinks it was probably due to the attacks of vomiting, which in each of his cases preceded death.

4. *Hobby on Quinine Amaurosis.*—Dr. Hobby records (Knapp's *Archiv.*, vol. xi, No. 1) a case of quinine amaurosis, which occurred in consequence of the administration of large doses (20 grains) of the alkaloid in malarial neuralgia. On the fourth day after taking the medicine, the patient's vision fell to 16-200 in the right and 3-200 in the left eye. The pupils were widely dilated, both retinæ were profoundly anæmic, and the visual fields were reduced to about 1-10th their normal size. Treatment consisted in the injection hypodermically of strychnine, and a ferruginous tonic. The improvement was rapid, and within ten days sight rose to 16-20, while the visual field of each eye had doubled. The affection showed itself first of all in the left eye, in which the pupil was dilated and insensible to light, for some time before the right eye showed any symptoms whatever.

5. *Derby on Hydrophthalmus treated by Iridectomy.*—Dr. Haskett Derby draws attention (Knapp's *Archiv.*, vol. xi) to the extreme rarity of hydrophthalmus as a disease, and the very meagre reports of the results of treatment which ophthalmic literature gives. He records three cases in which iridectomy had been performed as a curative measure, and in which he had been able to watch the results during a series of years. The first case occurred in a woman aged 20. Vision had been impaired since the age of eight. The case was a typical one of hydrophthalmus (the right eye being the worse of the two, and admitting only of quantitative perception of light; T + 2. Iridectomy was performed in 1865, with the result that vision improved after the operation until 2½ years ago, since which it had been steadily failing. The second case occurred in a man aged 22, of whose eight brothers and sisters four have hydrophthalmus, two being wholly blind. In the patient's case the disease had increased since birth, the right eye being the more affected. In 1864 an iridectomy was performed; but in 1866 the condition of the eye had not materially changed. Dr. Derby performed iridectomy in that year in the left eye, at which time vision was = 1-22, and was steadily failing. The patient was seen sixteen years afterwards. The eyes were then unchanged in appearance, but vision was still failing, though extremely slowly. He is now 38 years of age, and sees the motion of a hand at 10 feet. The other members of his family became blind at 17 years of age. The patient believes the operation arrested the progress of the disease. The third case occurred in a man aged 20. Of eleven members of his family four are blind; vision generally commencing to fail about the age of 14. Vision in each eye was 1-10; fields of vision were contracted. There was arterial pulse and glaucomatous excavation of the disc. Iridectomy was performed in 1870. Vision fell off immediately after the operation, but returned in full shortly afterwards. In 1872 it had fallen to 14-200 in each eye, and did not vary afterwards. The patient was seen in 1881; the visual field retained its previous limits, and the disease appeared to be definitely arrested. The author considers that in this affection iridectomy offers the best chance of preserving what is left of vision, or of spreading it over a great number of years. He therefore feels justified in recommending it as a method of treatment in these cases, in opposition to the opinions of some ophthalmologists. The operation is of course a difficult one, and the risk of hæmorrhage is considerable, but the curative effects are worth this risk.

6. *Hotz on an Unusual Effect of Calomel on the Eye.*—Dr. Hotz of Chicago records an interesting case (Knapp's *Archives*, vol. xi, No. 1), illustrating the caustic effects which calomel occasionally produces when applied to the cornea and conjunctiva. The patient was aged 38, and had never suffered from any specific disease. When first seen, the eyelids were red and swollen, the conjunctivæ roughened by enlarged papillæ and intensely chemosed. There was a large white crescent on the lower half of the ocular conjunctiva, its convex border reaching down to the lower retrotarsal fold. The transparency of the cornea was not affected, but the iris was discoloured, and the pupil bound down by synechiæ. The history of the case showed that the patient had suffered from acute iritis, for which, by an error in diagnosis, calomel had been applied locally. It had evidently acted as a caustic, which, as the patient had not been taking iodide of potassium, is a somewhat remarkable and rare occurrence. The sample of calomel when analysed was found to contain a large amount of free hydrochloric acid. Dr. Hotz remarks that at the temperature of the body the chloride of sodium in the tears can readily, in the presence of a minute trace of hydrochloric acid, change the subchloride into a perchloride, thereby producing caustic effects, a reaction which should be borne in mind.

7. *Holmes and Park on a Severe Injury of the Orbit.*—Drs. Holmes and Park record an unusually severe case of injury of the orbit, occurring in a boy aged 14 (Knapp's *Archives*, vol. xi, No. 1). The injury was caused by a splinter of wood penetrating the orbit. When first seen, the ocular symptoms consisted of small fistulous openings in the lower lid, diminished tension of the globe, considerable loss of vision, with tenderness and swelling of one side of the face, and impeded movements of the jaw. An exploratory incision along the border of the orbit demonstrated the presence of a foreign body, passing probably into the antrum. The antrum was therefore laid open by a preliminary operation; but, owing to the weak condition of the boy, and the

very copious hæmorrhage, the operation had to be abandoned. A second operation was undertaken some months later, and consisted in removing with chisel, saw, and forceps the inner half of the malar bone, and almost all the floor of the orbit. On removing still more of the outer wall and floor of the orbit, a foreign body was found and extracted with a strong pair of forceps. It was a piece of pine 2½ inches long, and half an inch square at its base. It had been lying with its anterior extremity engaged on a level below the infra-orbital ridge, and on the external surface of the orbit. Its posterior extremity was engaged just in front of the maxillary articulation. In its course it had penetrated the infero-exterior wall of the orbit, having lodged with one end in the orbit, and the other in the zygomatic fossa, and lying at the same time across the outer extremity of the spheno-maxillary fissure. A drainage-tube was inserted, and the wound subsequently healed satisfactorily. Vision was reduced to fingers at 5 feet, and the whole region supplied by the infraorbital nerve was entirely anæsthetic.

8. *Dujardin on Albuminoid Exudation on the Cornea.*—Under the above designation, Dr. Dujardin treats (*Recueil d'Ophthal.*, April 1882) of certain exudations, presumably albuminoid, which take place on the surface of the cornea after the application of heated substances. They are, in all the cases in which he has met them, due to burns with metal, never with caustics. He records five such cases, in which burns on the cornea had been followed by a white opacity, lasting only from twelve hours to two days. Such scars can often be removed by simply pressing the lids over them. They are important chiefly from a prognostic point of view, being in reality much less severe than their aspect would lead the observer to suppose.

9. *Parent on the Reflection of Oblique Rays.*—Dr. Parent (*Recueil d'Ophthal.*, April) has attempted to measure by means of keratoscopy the amount of astigmatism caused by the oblique incidence of rays of light in emmetropic eyes. He places the person to be examined at a distance of 1.5 mètres (nearly 5 feet), and observes the eye at angles successively of 15 deg., 30 deg., 45 deg., and 60 deg.; in the latter case the pupil being necessarily dilated with atropine. Then, by his proceeding of keratoscopy, the refraction in the vertical, horizontal, or other meridian is noted and corrected by a suitable cylindric glass, care being taken to place the glass perpendicular, not to the optic axis of the eye observed, but to the incident rays proceeding from the reflecting mirror. As the result of examination, after this method of an emmetropic eye, he found that for an angle of 30 deg. the vertical meridian remained practically emmetropic; from an angle of 45 deg. the astigmatism became mixed. He concludes as follows. 1. In the eye, as in lenses generally, oblique rays give rise to astigmatism. 2. This astigmatism for given angles of incidence is less for the eye than for a lens. 3. This astigmatism increases with the angle of incidence, and assumes the form of mixed astigmatism, with the peculiarity that the ametropia is more considerable in the myopic meridian than in the hypermetropic.

Litton Forbes.

REVIEWS.

Sarcoma and Carcinoma: their Pathology, Diagnosis, and Treatment. By Henry Trentham Butlin, F.R.C.S., Assistant-Surgeon and Demonstrator of Surgery and of Diseases of the Throat, St. Bartholomew's Hospital; lately Erasmus Wilson Professor of Pathology, Royal College of Surgeons. With four lithographic plates. London: J. and A. Churchill. 1882.

During the past two years, the author of this work has delivered the series of lectures on which it is founded at the Royal College of Surgeons; hence Mr. Butlin's method of dealing with his subject is already known to the medical public. For many years, as the reports of several societies amply prove, he has devoted much time to the study of malignant diseases, and this work is the result of his prolonged labours in that direction, and not a mere ambitious compilation. It cannot be denied that many young beginners have commenced life by writing a book, and sometimes a very good book and have continued their career in the independent and original study of the subject of their treatise which, of necessity, must have been a compilation. The power of expressing a doctrine that the learned cannot teach often exists among those who are relatively ignorant, and a fresh young mind frequently theorises with success over material patiently collected by an older worker. The book now subjected to our notice is a product of another principle, the fruit of personal observation of details, and independent analysis of pathological and not literary material.

Pathology, according to Mr. Butlin, always signifies morbid anatomy combined with critical comparisons of different morbid growths and processes. Theory is practically absent from his writings. Several contemporary pathologists, with as good outward and visible claims to authority, have enunciated very advanced theories on malignant disease; but not one word do we hear about the remarkable opinions of Creighton, Cripps, Thin, and others. Dr. S. W. Gross's name is certainly to be found in the pages of this work; but Mr. Butlin makes use of that name, reduced to what a mathematician would call his own terms, that is to say, not in reference to what epithelium can or cannot do, but in relation to the possibility of cancer of the testis in children. The key-note to the author's opinions on all existing theories is struck on page 12, where we are told that a vast series of trustworthy clinical and microscopical accounts of tumours must be first collected, in the manner which the author indicates throughout his work, before the general laws of malignancy may 'haply be discovered'. The author characteristically adds, 'but in the meanwhile a fair history may be obtained of the sarcomas and carcinomas of each individual region of the body'. He clearly prefers getting a 'fair history' to seeing a law settled or 'discovered'. He resembles Voltaire's inhabitant of Sirius, who loved to argue details of philosophy with another intelligent being called man, but, when solicited for his ideas on *le bout des choses*, presented to man a book of blank pages. It would spoil the sublime scientific task of searching through original materials, if a theory were found that would settle everything. Like the fox-hunter, the scientist is never over-eager to catch his game too soon, and thus to stop the exciting chase in which he delights. Pathologists like

Mr. Butlin have ever two things in their favour—firstly, they are working on what from most points of view are the soundest scientific principles; secondly, their subject, being infinite, can never be really settled by a theory.

As Mr. Butlin lays all stress on description, and insists on the great importance of the anatomical situation of a new growth, it must here be remarked that we only find malignant diseases of the testis, bones, tongue, œsophagus, and tonsil, discussed in these pages, or, rather, described, since our author does not 'discuss', on principle. It is impossible to review each individual chapter in our limited columns, as its entire point lies in the consideration of every line of descriptive pathology which it contains.

In the chapter on the testis, the comparative descriptions of sarcoma and carcinoma of that gland are most valuable, as are the author's remarks on the relation of enchondroma of the testicle to malignant disease. The sections on sarcoma of bone are very interesting, and, as not one word is said about primary cancer in that tissue, we must conclude that our author holds the prevalent modern opinion on the subject.

Probably the most valuable portion of the work is the chapter on sarcoma and carcinoma of the tongue. Mr. Butlin points out that the diagnosis of cancer from syphilitic ulceration in the earliest stages, when most good could be done, is never very easy, if the surgeon rely on inspection, touch, and the patient's history alone. The universal practice is to try for a few weeks the effect of antisyphilitic remedies, and certainly very foul ulcers sometimes disappear under such treatment; but when the sore happens to be cancerous, the objection to such a proceeding is obvious. Our author strongly recommends the microscopical examination of scrapings from incipient ulcers. He alleges that he has discovered important changes in the epithelium scraped off an ulcer which is malignant. The squamous epithelium removed from a syphilitic or tuberculous ulcer is well formed, the cells are of equal size, not granular, and with very small nuclei. But epithelial cells scraped from an incipient cancerous ulcer vary considerably in shape and size, their nuclei are much larger than those of normal cells, and sometimes there are several nuclei, or even nucleated cells within the larger cells, while granular material always occupies their interior. Cell-nests have not unfrequently been observed in these scrapings. These distinctions are well indicated in a plate.

In a chapter on malignant disease of the œsophagus, Mr. Butlin speaks very gloomily about treatment. 'Other than resection, no operation holds out the least likelihood of cure.' Œsophagotomy 'is very seldom applicable', 'nor does gastrostomy at present offer a much better prospect of relief, except by the almost certain hope which it affords of a quickly fatal issue.' Still the author has great belief in resection, in the few cases where it is practicable.

There are many similar observations on the diagnosis and treatment of malignant disease which appear for the first time in this work, not being included in the lectures. Consistently with the principles encouraged by its author, we hope and expect to see much more work on malignant disease of other parts from Mr. Butlin. The [illegible]t and ovary are not included in this treatise; [illegible] we look forward to the results of minute inv[illegible]tions of cases of cancerous degeneration, as se[illegible]n old ulcers and perineal fistulæ. But we may have to wait many years for such further information, since our author relies entirely on patient investigation; and previous experience of the study of tumours in one part is not likely to induce him to hurry through his labours in the examination of malignant growths in other structures. Still, when we get such additional information, we may count on its value and trustworthiness.

ALBAN DORAN.

The Pharmacopœia of the London Hospital. Compiled under the direction of a Committee appointed by the London Hospital Medical Council. London: J. and A. Churchill. 1882.

THE *Pharmacopœia* of the London Hospital having been for some time out of print, the Medical Council deemed it advisable that the whole matter should undergo thorough revision, and appointed a committee, consisting of certain members of the medical staff, to undertake the work. It is a matter for regret that the names of these gentlemen do not appear, so that we might know to whom we are indebted for having so ably and conscientiously carried out this arduous undertaking. To edit or compile a work of this description is no light task. The new *Pharmacopœia* of the London Hospital is not a puny work of thirty pages or thereabouts; but a bulky volume, as large as many a standard text-book. If it fulfilled no other function, it would, at all events, serve forcibly to illustrate the shortcomings of the *British Pharmacopœia*. It may serve too, as a stimulus to the authorities of some of the other hospitals, who should stir their latent energies, and endeavour to improve their own productions.

The first part of the work before us is devoted to materia medica, and consists of a list of drugs, with the preparations into the composition of which they respectively enter. In some cases an attempt has been made to define the drug. Thus, we are told that Picrotoxine, is the active principle of cocculus indicus. It does not appear, however, that it enters into the composition of any of the preparations, nor is the dose mentioned in the Posological Table. In a work of this description we should have expected to find at least a picrotoxine pill or mixture. In the second part the preparations are arranged in alphabetical order, and we have a goodly list of aquæ, balnea, capsulæ, cataplasmata, collunaria (nasal douches), collyria, confectiones, decocta, emplastra, enemata, gossypia medicata, injectiones—both for urethra and vagina—lintea medicata, pessaria, pigmenta, suppositoria, and so on. The formulæ have evidently been selected with great care, and many of them are entirely new, at all events in a Hospital Pharmacopœia. We see that only two kinds of capsules are made officinal—sandal wood oil and phosphorus. Many object to these preparations on the score of expense; but it is impossible to do without them, and we would be glad to see the list augmented by the addition of apiol and some others. Under the head of enemata, directions are given for the preparation of various forms of nutritive injections, and a special section is devoted to the subject of peptonised food. We are glad to note the introduction of a Mistura Sanguinis Exsiccati, or Mixture of Desiccated Defibrinated Bullock's Blood. The pigmentum chloralo-camphoratum, made by rubbing together equal parts of hydrate of chloral and camphor, till liquefaction ensues, is an useful local application for neuralgia and other painful affections. Almost the only serious fault in the work is the difficulty experienced in

finding a drug when its mode of administration is not known. Take, for example, the case of apomorphia, which is of much value as an emetic in cases of poisoning. It is not even mentioned in the *Materia Medica* list. We learn nothing from the Posological Table, except that the dose is a tenth of a grain; and it is only after a long search that we find it under the head of drugs 'kept in the form of discs'. There are ten solutions for hypodermic use, including even curara; but apomorphia is unaccountably omitted. We are greatly surprised that the committee prefer the expensive nitro-glycerine lozenges to the cheaper and more convenient one per cent. alcoholic solution. Nitro-glycerine, again, is not mentioned in the *Materia Medica* list; and we are not told how the lozenges are made, the basis even not being mentioned. It is well known that many cases of angina pectoris require large doses of nitro-glycerine many times a day; and for these unfortunate sufferers lozenges containing only one-hundredth of a grain in each are quite useless. The appendix contains a number of lists and tables, which will prove of the greatest value to students. Minute directions are given for case-taking, for the estimation of urea according to Dupré's method, of sugar, etc., whilst there are many formulæ of solutions for preserving and obtaining animal substances. Taking it on the whole, we have no hesitation in saying that it is by far the best Hospital Pharmacopœia that has yet appeared.

W. MURRELL, M.D.

Elements of Pharmacy, Materia Medica, and Therapeutics. By WILLIAM WHITLA, M.D., Gold Medallist, Queen's University, Ireland; Licentiate of the Royal College of Physicians and Surgeons, Edinburgh; Physician to the Ulster Hospital for Sick Children, etc. London: Renshaw. 1882.

The difficulty of writing a good text-book of materia medica and therapeutics has long been recognised. Dr. Whitla, departing from the usual custom, endeavours, in a small work of five hundred pages, to give an account of the elements of pharmacy, materia medica, therapeutics, and the art of prescribing. That the information on any of these subjects can be thorough or exhaustive, is obviously impossible, but the author has done his best to accomplish a difficult task. The first part, devoted to Pharmacy, is well and carefully done, and indicates a knowledge of practical dispensing, which, unfortunately, is becoming day by day more and more rare. We have tested practically the accuracy of many of the author's statements, and find that they are in the main reliable. The directions for making pills, spreading plasters, and compounding ointments and suppositories, are excellent, the descriptions being supplemented by an admirable series of illustrations. Under the head of Materia Medica, the drugs are arranged in alphabetical order, with their preparations. In many cases, there are appended to the descriptions short practical notes, which will be found of much value to those preparing for examinations. The sections on Therapeutics and the Physiological Action of Drugs are, of necessity, brief, but the information is precise and to the point. There are, however, statements to which exception might fairly be taken; the directions for the treatment of cases of poisoning being, in many instances, erroneous or incomplete. Thus, under the head of Aconite, the author says:—'Various antidotes have been recommended, such as charcoal, digitalis, etc., but experience says nothing in their favour.' This may be true, but it does not justify the omission of all mention of atropia as an antidote to aconite, or of the use of nitrite of amyl in these cases. It is stated that, in large doses, tobacco produces contraction of the pupil, but no indication is given that this is a point on which there is great diversity of opinion, most writers maintaining that tobacco follows the rules of the atropacæ, and dilates the pupil, especially if given in large doses. Probably, the most unsatisfactory portion of the work is that devoted to the non-officinal remedies. The whole subject is dismissed in seven or eight pages, and the information is meagre in the extreme. It must not be supposed, because we call attention to the blemishes in the work, that we are condemning it as a whole. On the contrary, the work has been well and carefully done, and reflects much credit on the author. The subjects have been thoroughly studied, and Dr. Whitla undoubtedly possesses exceptional powers of putting together in a condensed form, a vast amount of information on points which are universally recognised as being amongst the most difficult in the whole of the medical curriculum. The lessons on prescription-writing are by far the best we have seen, and these alone would serve to make the work popular with students.

W. MURRELL, M.D.

The Surgery of Deformities. By E. NOBLE SMITH, F.R.C.S., Surgeon to the Farringdon Dispensary. London: Smith, Elder and Co. 1882.

THIS is a sound practical guide to the treatment of bodily deformities, based evidently upon personal observation and experience. Although it is more specially the reflection of the author's own practice, it by no means lacks anything noteworthy or valuable in the practice of other surgeons.

Mr. Noble Smith has carefully collected and criticised the various standard works and monographs which have appeared on orthopædic surgery in this and other countries. The subjects of caries of the spine and hip-joint disease are treated in quite a fresh and original manner. The chapter on knock-knee is full of new ideas and suggestions for treatment, and we are glad to see that the treatment of this condition by osteotomy meets with but very qualified praise from the author. The section on the nature of deformities gives a succinct notion of what the deformities are which have come in course of time to be classed under the heading of 'orthopædic deformities'. Mr. Noble Smith discusses at some length the causes which give rise to deformities, more especially congenital abnormities.

The work contains an interesting chapter by Dr. Sturge on the causes of abnormal muscular contractions arising from nerve-lesions. In the chapter on club-foot, Mr. Noble Smith has followed the teaching of Mr. W. Adams, which is well known.

An excellent account of displaced semilunar cartilages of the knee and the mode of their reduction is given. The description of the treatment of lateral curvature of the spine is clear, precise, and convincing. The author is strongly in favour of constitutional treatment in all such cases where practicable. He does not, however, wholly discard the use of all spinal supports, but condemns the old-fashioned apparatus which interfere with muscular action. The apparatus used by Mr. Noble Smith can be adapted by the surgeon himself, and does not require the continual

interference of the instrument maker, which is such an unfortunate characteristic of some instruments.

We can cordially recommend the work as a guide to busy practitioners, who will find in it just what they want clearly set forth and illustrated. The illustrations are thoroughly practical and easily understood. The work amply sustains the sound reputation already acquired by the author.

Transactions of the Clinical Society of London. Vol. xiv. London: Longmans, Green and Co. 1881.

THIS volume, somewhat smaller than the preceding one, is not inferior to it in merit. It contains forty-seven communications, as against sixty in that of the year before. It is always a matter of difficulty to single out cases from a miscellaneous collection such as this, and where each is recorded for some point or points of special interest in the circle of which it forms part, and which it helps to illuminate. It may, however, be noted that four communications upon myxœdema are to be found therein; a case of progressive painful inflammation of arteries; three cases of cerebral disease of pointed bearing upon the function of the third frontal convolution—one in which a tumour, occupying the third right frontal, caused aphasia, the patient being left-handed; a second, in which disease in the third left frontal of a left-handed man did not cause aphasia; the third, in a child, left-handed by compulsion, his right being paralysed from birth. In this case, although there was recent softening and destruction of Broca's convolution, the speech was not affected.

We must not omit to mention a very valuable communication with which the volume closes, viz., the report of the committee on excision of the hip-joint. The report was intended to have especial reference to the indications for resorting to the operation, the results obtained from the operation as to mortality and the after-condition of the limb, the method of operating, and the nature of the disease. The conclusions are of great interest, and, when it is added that the committee was composed of Messrs. Macnamara, Bryant, Croft, Holmes, Hulke, Marsh, and Lyell, we need hardly add that it is of great practical value. JAMES F. GOODHART.

Ringworm: Its Diagnosis and Treatment. By ALDER SMITH, M.B. Lond., F.R.C.S. Second edition. London: H. K. Lewis. 1882.

THIS little book has deservedly reached a second edition in a comparatively short time. It is written by a practical man for practical men, and gives an excellent account of the various conditions produced by the growth of trichophyton tonsurans, in the hairs of the scalp. The author, from his position as resident medical officer at Christ's Hospital, has had unusual opportunities, not only of seeing many cases of ringworm (they are common enough), but of closely watching the effects of various methods of treatment. The results of his experience are fully and clearly described in his book. Mr. Smith relies largely, in treating this disease, on an ointment containing carbolic acid, citrine ointment, and sulphur ointment in various proportions; on oleate of mercury, in strengths of 5, 7½, and even 10 per cent. according to the age of the patient; and, in certain obstinate cases, on the treatment by croton oil, first suggested, we believe, in France. Mr. Smith's volume is an useful contribution to practical medicine. G. THIN, M.D.

Manual of Pathological Histology. By CORNIL and RANVIER. Second Edition. Re-edited and enlarged. Translated, with the approval of the authors, by A. M. HART. London: Smith, Elder, and Co., 1882.

THERE is no department of medicine which has made more rapid strides within the last few years than pathology, chiefly owing to the advances made in normal histology, normal physiology, and experimental pathology. Considering the paucity of treatises on this subject in the English language, the authorised translation of Cornil and Ranvier's well-known text-book by Mrs. Ernest Hart will be welcomed alike by students, practitioners, and teachers of medicine. We need say little in praise of the original work; it has occupied the first rank amongst the text-books ever since the appearance of its first edition. We find it freely quoted, not only in our English systematic treatises on medicine and surgery but also in those of Continental writers. Written in a clear, lucid, and succinct style, and comprehensive in its scope, avoiding speculative theories, and containing, above all, a vast amount of new and original matter, it has always been one of the most reliable books for reference. Utilising the vast material which had come under their notice, the authors have on most subjects been able to give the results of their own investigations, and were not satisfied with merely restating the observations of others. They have, however, not underrated the researches of other investigators, and, as the result, we possess in their treatise an admirable exposition of all that is known respecting the morbid histology of the tissues and organs of the human body.

A portion of the first edition (which appeared in three parts) having been written thirteen years ago, the authors felt compelled, in view of the many advances made in recent years, to write a second edition of the entire treatise. This second edition will appear in two volumes, the first of which has only just been published, and of this Mrs. Hart presents us with an excellent translation. This first volume treats in its first part of general pathological anatomy, and in its second part of the lesions of tissues.

One would have liked in the first part to have seen some mention of the recent researches on the intra-nuclear network, on hyaline degeneration, as described by Recklinghausen and his pupils, and on Weigert's coagulation-necrosis. The classification of tumours also is one which, perhaps, will not commend itself to English pathologists, the authors making the classification a purely anatomical one and thus grouping the carcinomata with the fibrous tumours, and separating them altogether from the epitheliomata and adenomata. These omissions are however, insignificant when compared with the many additions and new facts contained in this edition. Some of them, as, for instance, the description of the numeration of blood-corpuscles, are very useful to the clinical observer, as well as to the student of pathology.

In the second part of the first volume, the chapters treating on the lesions of bones, cartilage, and joints, which already in the first edition formed by far the best account given in any text-book on this subject, have been augmented so as to keep abreast of the advance of science; as, for instance, the paragraph on syphilitic bone-lesions. The chapter on

the pathological histology of the blood contains a brief *résumé* of the changes found in the blood in the different diseases; the part treating on the parasites of the blood might, however, we think, have been extended with profit, so as to include some more of the recent researches on micro-organisms, especially as no separate chapter is devoted to their consideration, unless the authors intend to include this in the second volume.

The last two chapters of the book treat of the pathological changes found in lesions of the brain and spinal cord; and here, again, we find several valuable additions. The bibliographical references have also been considerably increased, and brought down to the recent time.

As for the English translation, the highest praises are due to Mrs. Hart for the manner in which she has done the by no means eask task. The translation, besides being perfectly correct, and following closely the original, yet runs so smoothly that the reader will often think he is perusing an original treatise. In several points the English edition surpasses the French; thus, the translator has re-paragraphed the book, headed each paragraph with letters in Egyptian type, and added some useful notes and a complete index of contents.

The ilustrations, so useful a part in such a treatise, are from the same blocks and of the same excellence as in the original French edition.

Cornil and Ranvier, in its improved English dress, is thus sure to take its place amongst the first and best text-books on pathological anatomy; and we should be glad to see it in the hands of all medical students, and of all those who wish to keep themselves informed of the present state of pathology.

We now hope to see soon the second volume, which will treat of the pathological histology of the several organs, and which Mrs. Hart promises us as soon as it is published in France.

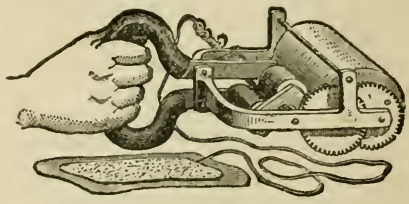
J. DRESCHFELD.

NEW INVENTIONS.

A NEW ELECTRO-MASSAGE INSTRUMENT.

It has occurred to Dr. John Butler, of New York, that the disadvantages and discomforts of electro-massage would be materially lessened if it were possible to combine the two methods of procedure —*Massage* (manipulation, or friction by the hands, on the limbs and joints), with electricity; and in watching the manipulator at his work, he conceived the idea that if the mechanical motion used in rubbing the patient could be made to generate an electrical current, which could be transmitted through the affected part while it was being manipulated, the requirements of the case would be met. Following out this idea, he succeeded in devising the instrument which is here illustrated and described.

The instrument, as will be perceived by consulting the accompanying cut, consists of a metallic roller, covered with chamois leather or other suitable material; an electro-magnet; and a permanent magnet, set in a strong frame, which holds the apparatus together. The roller acts as one of the electrodes, and is likewise the driving portion of the apparatus, communicating its motion through connecting gearing to the electro-magnet, causing it to revolve its poles opposite to those of the permanent magnet. The rounded portion of the latter, which is flared for greater convenience, forms the handle by which the instrument is moved over the surface of the patient's body. The proportions of the gearing are such that each revolution of the roller causes the electro-magnet to make twenty-five revolutions. The current thus induced is interrupted at each



revolution by a break-piece. The instrument gives a current sufficiently strong for all purposes for which it is intended to be used. To complete the circuit, a flexible metallic disk, or other suitable electrode, is connected by the binding post, the roller acting as the other electrode. Both electrodes are brought into contact with the body of the patient, and as the moistened roller is moved about with gentle or vigorous pressure, as the case may require, over the surface, the current is established and transmitted through the part over which the roller is caused to revolve.

This instrument combines at once the properties of a generator of electricity and of a kneading, rubbing or manipulating device. It is exceedingly simple, inexpensive and not liable to get out of order. Its operation, likewise, is so simple and obvious, that any person will understand how to use it after a few simple directions from the physician. As the current is generated by the inductive effect of the permanent magnet, the battery, with its acids or other liquids, is dispensed with, the instrument is always ready for use when required, and is very compact and portable.

Dr. Butler, who has devised this ingenious apparatus, affirms that the results from its use have exceeded his expectations. Its employment is very convenient; it fulfils most of the requirements of the induction current in general practice, and gives greater tonic effects than can be obtained from the old procedure of using manipulation and electricity separately.

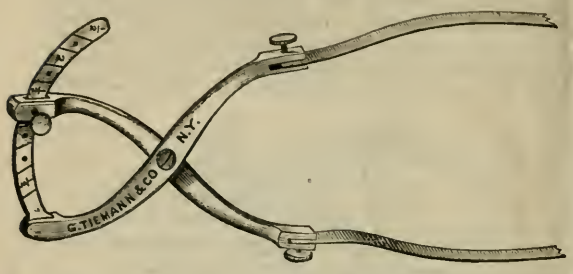
The manufacturers of this instrument are the Dynamo-Electric Manufacturing Co., of 907 Broadway, New York city.

A NEW CYRTOMETER.

The accompanying cut represents a cyrtometer, made for Dr. Theo. A. Weed of Cleveland, Ohio, by Messrs. Tiemann and Co., of New York, which he has used with very much satisfaction.

The instrument consists of two arms, each 2½ inches long, joined together by a screw, after the scissors pattern, holding narrow strips of aluminium long enough to completely encircle the chest. To the distal ends of the arms is attached an indicator, which may be set at any point on the scale. The manner of using the instrument is as follows. Set the indicator at any given point, by means of the thumb-screw; place the strips tightly around the chest, and mould them to fit exactly the various depressions and elevations; loosen the thumb-screw on the indicator; open the scissor-arms, and remove

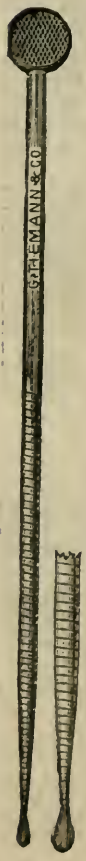
the instrument without displacing the strips; place the indicator in its former position, and lay the instrument on a large sheet of paper; trace carefully



all the curves of the strips with a lead-pencil, and the result will be an accurate outline of the chest-wall. Now, if the instrument be reversed, end for end, upon the paper, the position and character of the difference between the two sides of the chest will become apparent. It is unnecessary to discuss the many different diseases of the lungs in which a knowledge of existing elevations or depressions of a localised part of the chest-wall is of paramount importance to the physician.

The instrument, with shorter strips, will be found very useful in many of the local deformities which are found in the practice of every physician.

A NEW DILATOR FOR STRICTURE OF THE ŒSOPHAGUS AND NEW SPECULUM VAGINÆ.

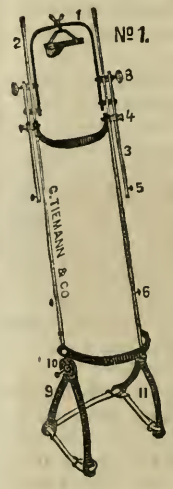


DR. I. L. CRAWCOUR, formerly Professor of Medicine in the New Orleans School of Medicine, writes in the *New York Medical Record* of August 6, 1881: 'Some time ago I was called to a case of stricture of the œsophagus. A child, eight years of age, had accidentally swallowed some condensed lye. Four months had elapsed since the accident, and nothing had been done. When I saw the child, it had not been able to swallow anything for three days. The smallest œsophageal sound would not pass, a small gum catheter or bougie bent against the obstruction, and one with the stylet would not take the proper curve. In this dilemma I bethought me of Otis' flexible urethral probe; this, the smallest (a No. 8 French scale), passed, but with great difficulty; after some few days, I passed Emmet's uterine probe, which is somewhat larger, and in this way was enabled gradually to dilate the stricture. The child meanwhile was fed by enemata. The stricture was gradually dilated by means of ivory bulbs attached to a flat metallic wire. It struck me that a series of flexible bougies, made on the spiral wire system, would be useful, not only in such cases, but also as urethral dilators; and I asked Messrs. Tiemann and Co. if they could make me some. It was a question whether they could be made of sufficient size, and yet retain their elasticity. Messrs. Tiemann have made me a set of four, which are admirable and answer every purpose.

'They are fifteen inches long, and, as will be seen by the cut, have a broad flat handle. They terminate in an acorn-shaped bulb, and are as follows; No. 1. Bulb No. 15, French gauge, attached to a short and narrow neck, rapidly increasing to No. 17; No. 2. Bulb 17, shank 19; No. 3. Bulb 19, shank 21; No. 4. Bulb 21, shank 24.

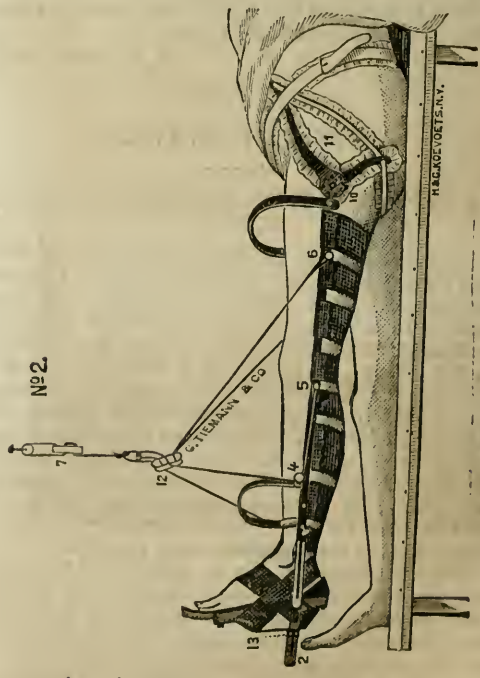
'These are the sizes which, I think, will be found in practice most useful, and, thanks to the skill and patience of Messrs. Tiemann, they are perfectly flexible.'

GENERAL LOWER EXTREMITY SPLINT.



In the *Atlanta Med. Rec.* for November 1881, Dr. Clendinen describes a splint which he has devised for extension and counter-extension, by weight of limb, with capacity for fixation. It consists of two side irons, which can be conveniently lengthened to accord with the length of limb of the patient. It can be suspended by cords and pulleys to the ceiling. A continuation, which can either be fixed or allowed to move by free joints (10, Fig. 1), attaches the splint to the pelvis, and, by adjustment of a rubber 'bearing', 'the line of counter-extension can effect inversion or eversion of the limb'. The footpiece is so arranged that 'the foot may be raised or lowered, and the limb inverted or everted. The footpiece can be extended upon the framework, and fixed in any desired position by set screws.'

'The pelvic bearings, in effecting counter-extension, are of self-adjustment, do not gall, and by the



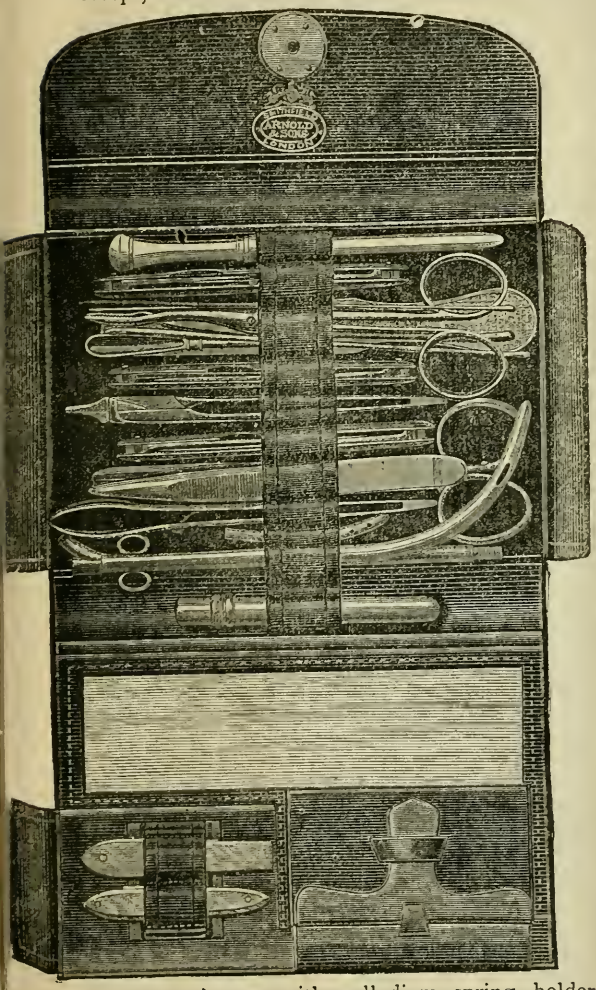
open angles circulation cannot be interfered with. By means of this splint, it appears that extension can be carried out while the limb is suspended in a sling.

E. NOBLE SMITH.

NEW-SHAPED POCKET-CASE.

Messrs. Arnold, of West Smithfield, have designed an improved pocket-case, the advantages of which over the old form of case will readily suggest themselves. It is made curved, so that it adapts itself to the contour of the body, and can be carried in the breast-pocket without bulging. The contents are arranged in an exceedingly small space. Whilst containing the full complement of instruments usually found in an ordinary three-fold case, its dimensions are only $5\frac{3}{4} \times 4\frac{1}{4} \times 1$ inches.

The case contains: exploring trocar and cannula, Syme's and Paget's abscess-knife, scalpel and finger-knife, sharp and probe-pointed bistoury, electro-plated spatula, bow dressing or polypus forceps, torsion forceps, dressing scissors, spring dressing forceps, silver male and female catheter united,



silver caustic-case with palladium spring holder, gum lancet, bleeding lancet, silver director, two silver probes, and half a dozen needles. In addition to the above, it is provided with an ivory tablet for pencil notes.

A NEW EUSTACHIAN CATHETER.

Dr. Samuel Sexton of New York offers an Eustachian catheter, the introduction of which into the guttural orifice of the Eustachian tube is less painful than those made of either metal or vulcanite. He writes:—Flexible instruments have been devised, as is well known, but none have possessed sufficient merit to retain a permanent place in the aurist's armamentarium. So far as is known to me, M. Deleau was the first to recommend a flexible catheter, the description of which may be found in his *Traité du Cathétérisme de la Trompe d'Eustache*, etc., p. 115; Paris, 1838. But the pain caused in withdrawing the stilette of Deleau's instrument led to its abandonment. It occurred to the writer that a catheter made of soft India-rubber, but sufficiently firm to retain the necessary curvature of the beak, could be used without a stilette, thus overcoming the principal objection to its adoption.

A catheter of this kind is shown in the wood-cut. The part A, is a cannula of German silver, nickel-plated; it is eight and a half centimètres in length and about one-half of a centimètre in diameter. The soft rubber portion, C, is eleven and a half centimètres in length. The cut is about one-half the size of the instrument. The metallic portion affords a firm handle for holding the instrument during its introduction and for subsequent manipulations.

Owing to the softness of its pharyngeal end, the catheter may have a much greater curvature than one of inflexible material, thus permitting its secure lodgment in the mouth of the Eustachian tube, when the necessary manipulations of the surgeon have brought it into position.

In cases of lateral deviation of the nasal septum, with closure of one side, I have succeeded in introducing the catheter into either Eustachian tube while the instrument remained in the unobstructed meatus. I may here state that the smooth and soft finish of the rubber used by the maker of the instrument will allow of very free movements being made in the nasal meatus and vault of the pharynx without giving rise to irritation of these sensitive parts.

Several sizes of the rubber portion of the instrument may be employed, but I have as yet required only two in my own experience, one of them being five and the other seven millimètres in diameter. The thickness of the rubber is one millimètre. The beak is more tapering than is shown in the cut. The cannula is tapering where it enters the flexible portion; in attaching the two parts, the ring guide of the cannula should correspond with the concavity of the curved beak. When the operator finds that the beak has engaged in the mouth of the Eustachian tube, as indicated by the diagnostic tube, it may be more firmly secured in its place by gentle inward pressure. From some months' experience in using this catheter, I believe it to possess the following advantages over other instruments. It enables the surgeon to more easily perform the operation of Eustachian catheterism. It is less painful to the patient. It admits of greater cleanliness; each patient may retain possession of the soft rubber portion of the instrument which has been used in his case. The instrument is made by G. Tiemann & Co. of New York.

Since writing the above, Dr. Sexton recalls the fact that an English surgeon, Cleland, introduced a flexible Eustachian catheter in 1731.

DIETETIC NOVELTIES.

MESSRS. BRAND AND CO.'S ESSENCE OF MALT.

The different extracts of malt are of such inestimable value in the treatment of wasting diseases, and all disorders of the digestive apparatus, that the appearance of a new preparation by a well-known firm will be hailed with pleasure. The essence of malt, made by Messrs. Brand and Co. of Mayfair, is one of the latest candidates for public favour. It is made by what is called the Dence and Mason process, and is guaranteed to consist solely of the essence or soluble portion of pure English malt, without admixture of any kind. We have given it a careful trial, and are satisfied that it is a reliable preparation. It is taken both by children and adults without the slightest difficulty, and patients always prefer it to cod-liver oil.

CONROY'S MALT COFFEE.

The special peculiarity of this coffee is that the malt which has been added to it makes a larger proportion of the extractives contained in the coffee soluble; and soluble in such a form that they are readily digestible. It amounts, in fact, to bringing into solution in an easily available form the nutritive principles and the alkaloids contained in the coffee, so that, instead of being left in the 'grounds', *i.e.*, the insoluble matter, and wasted, they are valuable as forming part of a beverage. This result is obtained by a correct use of malt, which extracts matters from the coffee which would not otherwise be brought into solution. As a coffee, this is a more valuable article than any we have recently examined, but the difficulty which occurs to us in connection with it is, whether it will be allowed to pass into consumption under the new, and as it seems to us absurd, regulations proposed in the new Inland Revenue Act. This is a matter which should be taken up more strongly than it has heretofore been by the makers themselves. Malt coffee certainly does not stand on the same basis as coffee adulterated with chicory. The makers of this preparation are Messrs. Evans, Son, and Co., Hanover Street, Liverpool, and it is to be had retail of chemists and grocers.

MISCELLANY.

MISS E. A. ORMEROD, F.M.S., consulting entomologist to the Royal Agricultural Society, has been appointed special lecturer on Economic Entomology at the Royal Agricultural College, Cirencester.

A COLLEGE FOR MEDICAL PRACTITIONERS has been inaugurated at St. Louis, to teach medical practitioners, by practical instruction, the special branches of medicine and surgery. There will be twelve departments, so arranged that special courses may be taken with as little loss of time as possible. The following gentlemen have been elected to fill a part of the departments: Thos. F. Rumbold, M.D.; Ewd. Borck, M.D.; W. Hutson Ford, M.D.; Wm. Dickinson, M.D.; W. B. Outten, M.D.; Col. Fred. T. Ledergerber, Attorney-at-Law; C. H. Hughes, M.D.; and other gentlemen who also have had especial advantages in their departments will be added. Particulars may be had of the Dean, Dr. Thos. F. Rumbold, 1225, Washington Avenue; or of the Secretary, Dr. Edw. Borck, N. E. Corner of Fourth and Markets Streets, St. Louis, Mo.

A NEW APPARATUS FOR TAKING TRACINGS.—M. D'Arsonval has invented an apparatus for taking tracings at a distance free from rubbing. The smoke, or soot, is stored in an India-rubber bag, or produced by a current of air issuing from a gasometer, or a bag full of gas. Tinder, or the leaves of certain plants, answer equally well; likewise the smoke of a lamp, or a smoky candle. The registering stylus is hollow, and the smoke passes along the rotatory axis. In another kind, the stylus moves along with the tracing-paper, and the jet of smoke is stationary. M. D'Arsonval made a communication to the Biological Society, in which he says that the instrument can be varied in numberless ways.

GERMAN PREPARATIONS OF IRON.—Dr. Walton states that there are three preparations of iron widely used in Germany, which are very valuable, both as regards their therapeutical effects, their palatability, and their tolerance by the digestive organs. They are probably procurable at any of the German druggists in England, and are entitled: 1. 'Ferrum Oxydatum Saccharatum Solubile', or *Eisen Zucker*, given in the form either of powder or syrup. 2. 'Tinctura Ferri Pomata', a weaker and pleasant preparation, suitable for children. 3. *Pyrophosphorsäures Eisen*, which is soda-water containing the pyrophosphate of iron in clear solution, and drunk at dinner. Another form extensively used is the 'Syrupus Ferri Pyrophosphorici cum Ammonio Citrico', formerly known as 'Syrupus Napoleonis', from its having been taken by Napoleon III. It is a very pleasant preparation, but not to be compared with the *Eisen Zucker.—Med. Times and Gaz.*

INDIAN CORN.—The report of the commission appointed by the Academy of Science, to examine the memoir by M. Fua, on the 'Hygienic Properties of Indian Corn,' states that this cereal is not only a most healthy article of food, but it repairs waste, and the use of it cannot be too widely diffused. It is only dangerous when badly preserved, and if attacked by smut or blight. M. Fua has devoted several to the endeavour to popularise the use of Indian corn as an article of food, and also its cultivation. M. Fua received the thanks and approbation of the Academy for his memoir.

A FEMALE AMBULANCE ASSOCIATION.—L'Union des femmes de France, which was founded last year for the purpose of aiding the sick and wounded in time of war, and sufferers from national misfortune, has recently held its first general meeting. Mme. Koechlin-Schwartz was in the chair. The Union is in a prosperous state, and consists of 1,024 members. Its depôt is well stored, and all ambulance appliances will be plentifully supplied when wanted. The Union has organised a school, where 250 women learn how to attend and nurse the sick and wounded, and at which Professors of the Paris Medical Faculty lecture. Thirty-six diplomas have been granted. Mmes. Gouron-Boisvert, Milly, Jully and Dideo, have taken prizes.

THE KOLA NUT.—M. Chatvis has brought before the Académie des Sciences, on behalf of Herren Heekel and Schlagdenhauffen, a few particulars as to the 'gourou', or Kola nut, the fruit of the *Sterculia acuminata*. It serves the same purpose in Equatorial Africa as the maté or coca in America, being used as a tonic by the negroes. Travellers report it to have the effect of making the worst water fresh and agreeable, which renders it invaluable in a country where water is scarce and the sun scorching. This property would appear to be due to the presence of tannic acid and a bitter principle, caffeine, and theobromine, combined with a certain sweetness due to glucose.

ERRATUM.—In our notice of the Alupikos Boot, in the April number of the LONDON MEDICAL RECORD, we described the maker as Mr. Thomas Parker, 175, Oxford Street. It should have been 145, Oxford Street.

THE EASY ADMINISTRATION OF MEDICINES.

By G. F. MEESER, M.D., Philadelphia, Pa.

A reprint from the 'MEDICAL MONTHLY', July, 1881 (Richmond, Va., U.S.A.).

THE 'easy administration of medicine' is a subject requiring the careful and thoughtful attention of physicians, as well as of interest for the convenience and pleasure of the patient. The advancement of homœopathy in certain sections of the country has depended, to a great extent, upon the easy and pleasant doses administered by followers of that school. The elegant pharmaceutical preparations compounded by the tasty and skilled chemist and pharmacist have done much to rob the physician's prescription of its terror and render the medicine palatable to the delicate patient.

Very recently, a new and important class of medicines has been introduced by the ingenious and enterprising house of Messrs. William R. Warner and Co., of this city, denominated 'Parvules'. They bear evidence of exquisite taste and skill, and I have seen nothing of late which seems to supply a necessity so perfectly as they do.

The list of 'parvules' prepared and kept in stock by this house comprises thirty-eight varieties. These 'parvules' are, for the most part, composed of simple substances in minute globular form, less in size than granules, and are sold in small vials suitable for pocket cases. They are convenient, portable, and easy of administration. The giving of small doses at short intervals, say every hour instead of every two or three hours or three times a day, produces a more salutary effect.

The question of the ready solubility of these 'parvules' claimed my attention, and this I proved to my perfect satisfaction by placing those containing camphor, etc., in the mouth and then observing the effect.

I have seen nothing to please me more than these ready-prepared doses. I can give four parvules of aloin, each containing one-tenth grain, at bed time or at any time throughout the day, and get the full purgative effect desired without nausea or pain. I give these, one at a dose, three times daily, or occasionally for habitual constipation, with the utmost benefit. When liver troubles also occur, I give parvules of podophyllin, each containing one-fortieth grain, in a similar manner. Two parvules of calomel, each containing one-twentieth grain, given every hour for five doses, produce bilious evacuations, equal to ten grains of calomel as ordinarily administered.

These doses are in no sense homœopathic when given by this rule: one every hour, two every two hours, or three every three hours. To illustrate the fact that these are allopathic, let us take a parvule of morphia, one-fiftieth grain, and give one every hour. This would equal about one-half grain during the twenty-four hours. The various medicated waters which are now so liberally patronised for their aperient effect, etc., I believe are harmful, because they disturb digestion by diluting the gastric juices and reduce the temperature of the stomach. Parvules of aloin, one-tenth grain each, or of podophyllin, one-fortieth grain each, would replace the use of such waters most advantageously.

A NEW AND IMPORTANT CLASS OF REMEDIES.

PARVULES (Registered).

☞ **You are cautioned against imitations and substitutions offered under other names.** ☜

This is a new class of medicines (minute pills) designed for the administration of remedies in small doses for frequent repetition in cases of children and adults. It is claimed by some practitioners that small doses given at short intervals exert a more salutary effect. *The elegance and efficiency of Parvules, and the avoidance of cumulative effect, depend on our mode of preparation.* The Dose of any of the Parvules will vary from one to four, according to age, or the frequency of their administration. For instance, one Parvule every hour, or two every two hours, or three every three hours, and so on for adults. For children, one three times a day is the minimum dose.

Price 1s. per Bottle of 100 each. Discount for quantities.

Pocket Cases, with 20 varieties, for the use of Practitioners, 24s. net. Ditto, with 10 varieties, 12s. net.

SUPPLIED BY ALL DRUGGISTS, OR SENT BY MAIL ON RECEIPT OF PRICE.

Acidi Arceniosi .....1-100 gr.
Medical properties—Alterative, Anti-periodic.

Acidi Salicylici .....1-10 gr.
Med. prop.—Anti-rheumatic.

Acidi Tannici.....1-20 gr.
Med. prop.—Astringent.

Aconiti Rad. .....1-20 gr.
Med. prop.—Narcotic, Sudorific.

Aloin .....1-10 gr.
Med. prop.—A most desirable cathartic.

DOSE.—4 to 6 at once. This number of Parvules, taken at any time, will be found to exert an easy, prompt, and ample cathartic effect, unattended with nausea, and in all respects furnishing the most desirable aperient and cathartic preparation in use. For habitual constipation, it replaces when taken in single parvules, the various medicated waters, without the quantity which they require as a dose, which fills the stomach and deranges the digestive organs.

Aluminis .....1-10 gr.
Med. prop.—Astringent.

Ammonii Chloridi.....1-10 gr.
Med. prop.—Diuretic, Stimulant.

Antimonii et Potass. Tart. 1-100 gr.
Med. prop.—Expectorant, Alterative.

Arnicæ Flor .....1-5 gr.
Med. prop.—Narcotic, Stimulant, Diaphoretic.

Arsenici Iodidi.....1-100 gr.
Med. prop.—Alterative.

Belladonnæ Fol. .....1-20 gr.
Med. prop.—Narcotic, Diaphoretic, Diuretic.

Camphoræ .....1-20 gr.
Med. prop.—Diaphoretic, Carminative.

Calomel .....1-20 gr.
Med. prop.—Alterative, Purgative.

DOSE.—1 to 2 every hour. Two Parvules of Calomel, taken every hour, until five or six doses are administered, (which will comprise but half a grain), produce an activity of the liver which will be followed by bilious dejections and beneficial effects, that twenty grains of Blue Mass or ten grains of Calomel rarely cause, and sickness of the stomach does not usually follow.

Cantharidis .....1-50 gr.
Med. prop.—Diuretic, Stimulant.

Capsici .....1-20 gr.
Med. prop.—Stimulant and Carminative.

Cathartic Comp. Officinal ....1-3 gr.
Med. prop.—Cathartic.

Cathartic Comp. Improved ..1-3 gr.
Med. prop.—Cathartic.

Digitalis Fol. .....1-20 gr.
Med. prop.—Sedative, Narcotic, Diuretic.

Dover's Powder.....1-3 gr.
Med. prop.—Anodyne, Soporific.

Ergotinæ.....1-10 gr.
Med. prop.—Emmenagogue, Parturient.

Ferri Redacti .....1-10 gr.
Med. prop.—Tonic.

Gelsemini Rad. .....1-50 gr.
Med. prop.—Nervous and Arterial Sedative.

Hydrarg. Bi-Chlor. .....1-100 gr.
Med. prop.—Mercurial, Alterative.

Hydrarg. cum Creta .....1-10 gr.
Med. prop.—Alterative.

Hydrarg. Iodid. .....1-20 gr.
Med. prop.—Alterative.

Hydrastin .....1-20 gr.
Med. prop.—Tonic, Astringent.

Iodoformi .....1-10 gr.
Med. prop.—Alterative.

Ipecac. .....1-50 gr.
Med. prop.—Emetic, Expectorant.

Morphiæ Sulph. .....1-50 gr.
Med. prop.—Narcotic, Sedative.

Nucis Vomicæ.....1-50 gr.
Med. prop.—Tonic, Stimulant.

Opii .....1-40 gr.
Med. prop.—Narcotic, Sedative, Anodyne.

Phosphorus .....1-200 gr.
Med. prop.—Nerve Stimulant.

Piperinæ .....1-20 gr.
Med. prop.—Tonic, Anti-periodic, Carminative.

Podophyllini.....1-40 gr.
Med. prop.—Cathartic, Cholagogue.

Two Parvules of Podophyllin, administered three times a day will re-establish and regulate the peristaltic action and relieve habitual constipation, add tone to the liver, and invigorate the digestive functions.

Potass. Bromidi.....1-5 gr.
Med. prop.—Alterative, Resolvent.

Potass. Arsenitis .....1-100 gr.
Med. prop.—Alterative.

Potass. Nitratis.....1-10 gr.
Med. prop.—Diuretic and Refrigerant.

Quiniæ Sulphatis .....1-10 gr.
Med. prop.—Tonic, Anti-periodic.

Santonini .....1-10 gr.
Med. prop.—Anthelmintic.

Strychniæ .....1-100 gr.
Med. prop.—Nerve Stimulant, Tonic.

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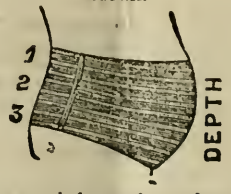

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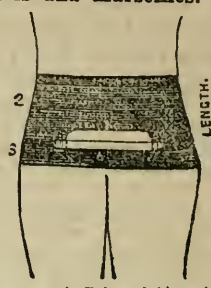

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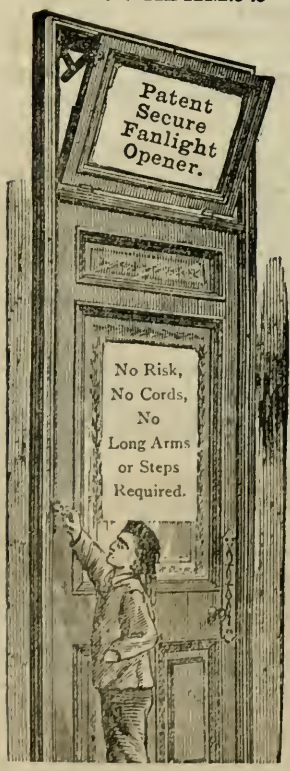

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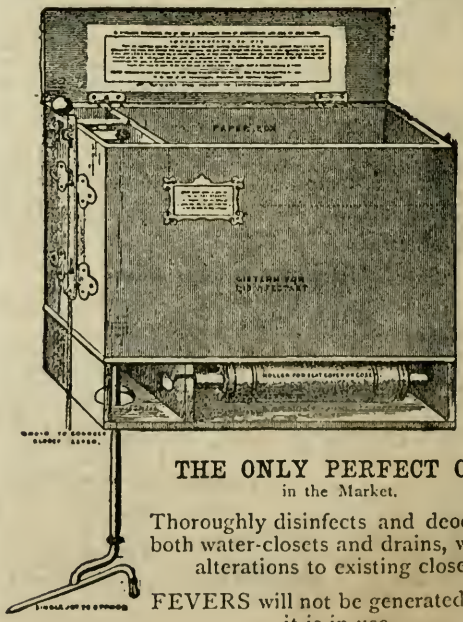

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LIEBIG'S EXTRACT OF MEAT AND MALT WINE (COLEMAN'S).
TESTIMONIALS.

Thorpe Hamlet, Norwich, February 23rd, 1881.

SIR,—A short time since I was induced by the novelty of the title to send for a bottle of your Liebig's Extract of Meat and Malt Wine. I was perfectly acquainted with the value of the *Extractum Carnis*, and not quite a stranger to the invigorating and fortifying properties of Malt Wine, and, therefore, felt a natural curiosity to test them when combined. Men who work hard, as I do, not muscular hard work, but that which is quite as exhausting, viz., brain work, very often experience the need of, and have sometimes an almost irresistible craving for, a 'pick me up'; and very often the panacea for a time for lassitude, and that state of mind which renders work irksome, are alcoholic stimulants, the use of which must sooner or later end disastrously. The man who can furnish a remedy sure, certain, and harmless, for the lassitude which follows constant brain work, is a benefactor of his species, and may be said to have added many years of usefulness to the lives of useful men. Your extract, if a success, and when more generally known, will be used by all toilers of the mind.

Yours faithfully, O. D. RAY.

LIEBIG'S EXTRACT OF MEAT AND MALT WINE (COLEMAN'S).

Queen's Crescent, Haverstock Hill, March 5th, 1881.

DEAR SIR,—Some time since, being greatly fatigued with over-work and long hours at business, my health (being naturally delicate) became very indifferent. I lost all energy, strength, and appetite, and was so weak as to be scarcely able to walk. As you are aware, I sent for a dozen of your Extract of Meat and Malt Wine, which, in a few days, pulled me up marvellously. Three or four glasses of it daily have quite altered and restored me to better health than ever, 'without the assistance of a doctor'. I am now giving it to my son twelve years of age, whom we have always thought consumptive, and from a puny ailing boy he seems to be fast growing into a strong healthy lad. Enclosed you have a cheque. Please send me two dozen of the 'Extract'. With thanks for your prompt attention to my last.

I am, Sir, yours truly, GEORGE A. TYLER.

LIEBIG'S EXTRACT OF MEAT AND MALT WINE (COLEMAN'S).

Grampound, February 25th, 1881.

Mrs. Coulson thanks Mr. Coleman for the book and stamps, and she has no doubt but that 'the tonic' is a good one. Mrs. C. encloses twelve stamps for basket.

LIEBIG'S EXTRACT OF MEAT AND MALT WINE (COLEMAN'S).

Vicarage, Kingsbridge, Devon, January 25th, 1881.

DEAR SIR,—We are ten miles from the railway, and have been snowed up, consequently the wine has only just arrived. I enclose a cheque for £2 11s. 6d. I like the wine, and will recommend it,

Mr. Coleman, Norwich. Yours faithfully, A. N. KINGSTON.

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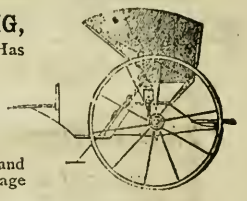

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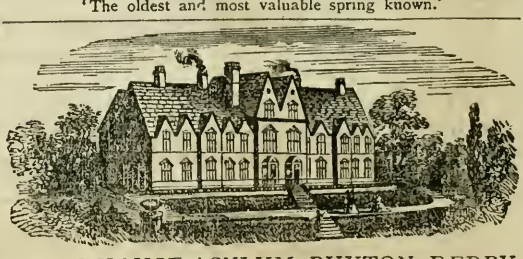

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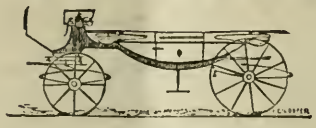

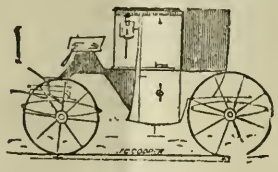

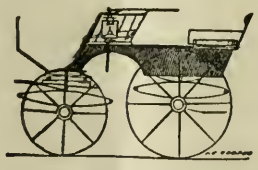

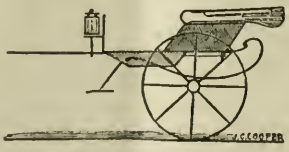

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"New York Medical Journal," *August* 1880, Dr. F. Weir,
in Lecture delivered to the College of Physicians and Surgeons, New York.

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